THE TIMES
Higher Education
SUPPLEMENT

Leeds plans rebellion on overseas students

by Sue Reid

Leeds Polytechnic is planning to defy the Department of Education and Science's instruction to reduce overseas student numbers in the next academic year. The college governors have decided to reject a quota system and continue their foreign enrolments at the same level.

Their decision follows an appeal by two other polytechnics—Leicester and Wolverhampton—for special treatment from the DES. They have asked the department for permission to stagger the reduction in foreign student numbers over a period of several years.

All three colleges have acted in response to the DES ruling, outlined in a special circular last August, that overseas student numbers in the next academic session should be reduced to the 1975-76 level of 75,000. Numbers currently stand at 80,000.

But while the Committee of Vice-Chancellors and Principals have advised universities to ignore the circular no such advice has been forthcoming from the Committee of Directors of Polytechnics.

Leeds is the first polytechnic to firmly reject the quota ruling. In 1975-76 its foreign numbers stood at 450 compared with 500 in the current academic session.

A spokeswoman told the THES this week: "The college's academic board considered the quota problem and then referred the matter to the governors. They have proposed there should be no change in the enrolments policy."

At Wolverhampton foreign numbers now stand at 320, compared with 174 in 1975-76. To cut back to the level two years ago by next autumn would, claims the college, mean that few, if any, foreign students could be admitted next year.

The college's governing council has asked the DES for special arrangements to allow the reduction to 174 overseas students to be phased in over three years. This would allow an intake of 80 new foreign students in each of the next three academic sessions.

Leicester Polytechnic is facing a cutback in foreign students from the present total of 456 to 326, the 1975-76 level. It has asked the DES for permission to reduce its annual intake to 120 for the next two years with a commitment to achieving the 326 figure by 1979-80.

The college has already elicited the information that a 10 per cent "tolerance" in numbers would be acceptable to the department. However, a DES spokesman said this week that the requests from Leicester and Wolverhampton were still under consideration.

● The number of overseas students in Britain is only a small proportion of the overall total in higher and further education, Mr William Van Straubenzee, MP, told the World University Service's annual conference this week.

He said that in 1975 there were 31,539 overseas students in universities compared with 237,175 from the United Kingdom. In further education in the same year overseas students enrolled in grant aided colleges totalled 42,159 on full time or sandwich courses out of a total force of 3,924,529.

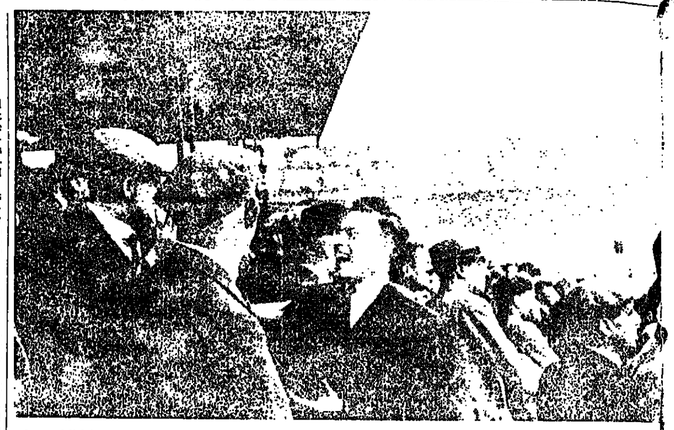
Arguing in favour of Britain retaining her role as an educator of foreign students, Mr Van Straubenzee said: "A rich and powerful country such as Britain still has a moral duty to share some of the wealth of its education with those from less well developed nations.

"Overseas students help to 'open windows' and make British students more aware of the value of the international dimension. Since many are postgraduates they also add to the research effort of the British universities."

Links made at university or college often continued when overseas students returned to their home country. A number of Third World political, cultural and industrial leaders had studied in Britain and this had been of direct material advantage to Britain.

"Where trade once followed the flag it now certainly follows the overseas student when he returns home. Money spent on overseas students is an important investment for this country's future. This is a fact recognised by our main industrial competitors abroad and we ignore it at our peril, Mr Van Straubenzee warned the conference at the Royal Holloway College.

He said that the contribution made by the non-university education sector to the education of foreign students was no less significant than the university. A high proportion of these students joined British professional associations and upheld standards abroad.



An exhibition of photographs taken by Humphrey Spender during 1937 and 1938 in Bolton and Blackpool as part of the Mass Observation project is to be staged at Southampton University's photographic gallery from next week. This print of spectators at a Bolton Wanderers home match in 1937 is included in the show. The Mass Observation project was a nationwide attempt to redress the communication gap between the opinions published by politicians and the media, and those of the man in the street.

Student tells of Special Branch visit

continued from front page

of the Official Secrets Act, which he produced, so that the conversation would be treated in the strictest confidence. I refused."

The college's student association reported the incident to Mr Norman Buchan, Labour MP for Renfrew West, to Mr Robin Cook, Labour MP for Edinburgh Central, and to the National Union of Students.

Mr Brian Peoples, student association president, said: "We got in touch with the college authorities to find out if they had any dealings with Special Branch in this case. They denied any knowledge of what the policeman was up for. We accept that."

Mr Tom Howie, the principal, said this week that it would be wrong to make any comment on the matter until the governor's committee had made their report. Investigations were taking place.

Sir James Mactarlane, chairman of the college governors, said the executive committee had met once to consider the incident and would be probably meeting again yesterday. He declined to comment any further until he had established the facts of the matter. It is hoped that a report will be produced for the full board of governors by the first week in February.

Mr Cook, who is intending to take the matter up with the Home Office and to ask a Parliamentary question on the legality of tax free payments, said this week that he would be "extremely surprised if there was a university in Britain that does not have a Special Branch officer or informant working within it." He called for an inquiry into the Special Branch which, he claimed, had quadrupled in size in the past 20 years.

Mr Norman Buchan, Labour MP for Renfrew West, has already written to the Home Office about the affair. A Home Office spokesman said that the letter had been forwarded to the Scottish Office.

Mr Peter Ashby, a vice-president of the National Union of Students, described the incident as "outrageous in every sense of the term. He said the NUS would be asking the Home Secretary if on any formal level authorization had been given to finance such payments to students for passing on information about their contemporaries.

Numeracy scheme launched to a flood of demand

by Maggie Richards

Britain's first nationwide numeracy scheme gets under way tomorrow and already the organizers report a flood of demands for training materials.

The first programme in the Make It Count series, compiled jointly by Yorkshire Television and the National Extension College at Cambridge, will be transmitted to some independent television regions tomorrow.

The programmes will be accompanied by a workbook, a puzzlebook and a cardgame—all available from the NEC. Students will also be offered the option of taking computer-marked tests to check their progress.

A manual and training pack has also been produced by the NEC for tutors.

Response to the Make It Count series has been "absolutely enormous" according to NEC director Mr Richard Freeman.

"Just before Christmas more than 1,200 institutions had ordered materials", he reported this week. "This is beyond anything we had hoped for, and more will come in over the next few months.

"We are very excited about the response. It has been taken up on a much larger scale than we thought the cutbacks in local authority spending had made likely."

The NEC has also despatched 5,000 posters so that colleges and local authorities can advertise their own numeracy schemes. Students will be urged to apply to the NEC for training materials at the end of each programme in the television series.

They will be sent a leaflet containing details about the NEC's own materials, and advice on seeking help locally. The NEC estimates that more than 20 per cent of the population has difficulty with simple arithmetic.

The first programme in the Make It Count series will go out at the following times:

Saturday January 7: 9.40 am Granada.

Sunday January 8: 9.25 am Yorkshire, Tyne Tees, Southern, Border Anglia, Westward, 11.30 am London Weekend, ATV, STV.

Thursday January 12: 12.30 pm Thames, Harlech, Ulster, Grampian. (All other channels which have previously screened the programme will be transmitting a repeat at this time.)

We must change says Slipman

by Peter David

The National Union of Students will have to make important changes in its structure and philosophy to maintain its credibility into the 1980s, its president, Ms Sue Slipman, said this week.

She told delegates at the NUS university policy conference at York University that the NUS had become an increasingly important organization, with a big part to play in tackling the problems of youth unemployment and changes in the shape of the education system.

But it was important to avoid turning it into something more akin to a political party than a union for all its members. "In the past the NUS has not been an expression of the mass opinion of students", she said. "It has been an expression of activist opinion."

Ms Slipman went on to warn against using NUS funds to make payments which courts might consider *ultra vires*. She pointed out that the House of Commons Public Accounts Committee, under Sir Edward du Cann, MP, had already begun an investigation into ways of making student union expenditure more publicly accountable.

"There are a great many people who would like to be able to attack student unions", she added. "We want to be sure that if attacks take place we have not invited them by our own actions."

Ms Slipman claimed that the NUS decision last month to end its speaking ban on fascists and fascism meant that students were no longer "mobilization fodder" for rallies against the National Front.

In future, she said, the NUS would tackle the practical problems faced by young people in education instead of concentrating on "abstract ideological issues".

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Mrs Hart holds up commission

The radical plan for a central standing commission to keep overseas students affairs in Britain under consistent review is being placed in jeopardy because of opposition from the Ministry of Overseas Development.

The minister, Mrs Judith Hart, and her officials, are known to be against the scheme, first mooted last year by the United Kingdom Council for Overseas Student Affairs and the Council for Education in the Commonwealth.

The plan has been under consideration at ... postgraduate department of Education ... Applied ... the Home Office, t... or ... and Commonwealth ... and the CSM, since last Se... er. A decision was called ... ay the start of the last Parliamentary session but now, four months later, no firm answer has been given to either the UCKOSA or the CEC.

They are arguing for a complete rationalization of overseas students' policy with a central commission, made up of representatives of voluntary and statutory bodies and the teacher unions, to make policy recommendations to the Government on fee levels, hardship funds, course provision and regulations covering the 80,000 foreign students.

It would also gather information from universities, colleges and Government departments on the demands for education and training in Britain from abroad.

The UCKOSA and the CEC have proposed that a central executive committee should assist the commission and have the power to invite officials of relevant Government departments to attend meetings as "observers according to the subject under discussion".

But this is being opposed by the ODM and is also causing concern among DES, FCO and Home Office ministers and officials.

While Mrs Williams, Secretary of State for Education and Science, must make the final decision she will act after full consultation with the ODM and the other interested Government departments.

The DES confirmed this week that the proposal was still under consideration but the ODM refused to confirm their opposition. A spokesman said: "The decision about the commission will be taken by the DES."

NEXT WEEK

Interview with Dr Albert Sloman
The Schools Council's proposed examination structure
Four pages of reviews of new economic books
German universities in 1945
Rhodri Jeffreys-Jones reviews Herbert Gutmann's book on American social history
In-service education in America
Going into Europe by Maurice Ganston

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At last—now for the good university news

by Peter Scott

A remarkable revival in the financial fortunes of the universities is heralded in the White Paper on public expenditure which was published yesterday. Not only does it seem that the Government intends to compensate universities in full for the extra 13,000 students they will take between now and 1981-82; but also a substantial increase in expenditure next year, 1978-79, has been allowed for—an indication that Mrs Williams's promise to rectify the university teachers' pay anomaly will be kept.

According to the White Paper universities' recurrent expenditure will rise from the present total of £782.6m to £939.2m in 1981-82 at constant prices, an increase of slightly over 20 per cent. In the same period the total education budget will increase by only 3.1 per cent, from £7,646.8m now to £7,881.7m.

In fact the annual rate of increase in university spending, 1.6 per cent, will be half as high again as the increase in local education spending over the next five years. Part of the explanation for the more rapid increase in university spending is the continuing expansion of student numbers: this year there are 277,000 students; in 1981-82 they will have 310,000, an increase of almost 12 per cent.

However, universities would only need an extra £94m in 1981-82 to compensate for those extra students. In fact they are to receive £156.6m more. The extra £60m, nearly all of which will be given next year, has almost certainly been allocated for two purposes: to pay for the rectification of the pay anomaly and to compensate for the undercalculation of this year's cash grant.

The full figures for the recurrent expenditure of the universities over the next five years, all at 1977 prices, are as follows: £782.6m (1977-78); £847m (1978-79); £881.6m (1979-80); £910.4m (1980-81); £939.2m (1981-82). The annual percentage increases, starting from 1977-78, are 8.2, 4.06, 3.29 and 3.16 respectively.

The percentage of the age group going on to higher education is expected to increase from the present 13.5 to 14.5 in 1981-82. During the same period the size of the relevant age group will increase from 830,000 to 920,000.

However, the Government also intends to maintain its present restrictive policy towards overseas students. It expects their number to fall from the present 52,000 to 44,000 over the next five years, implying a decline in their proportion in higher education as a whole from 10 per cent to 7.6 per cent. This is still higher than the 1972-73 figure of 6.1 per cent, before the recent expansion in their numbers got under way.

The White Paper says staffing standards in higher and further education will remain broadly constant at 1977-78 levels. Taking into account the increase in the number of students this suggests that between 3,000 and 4,000 extra university teachers will be employed over the next five years.

In contrast to the universities, expenditure on further education and teacher training will only increase by just over 10 per cent, from £839.3m to £979m. However, there is no breakdown between advanced and non advanced further education and the apparently less generous treatment must be largely accounted for by the decline of teacher training, which no longer appears as a separate category.

A final note of optimism—according to the White Paper money has been allowed for the building of the new British Library next to St Pancras Station from 1979-80 onwards.

Public Expenditure to 1981-82, HMSO, Part 1—70p; Part 2—£3.35.

Engineers want to crank up degree status

by Sue Reid

Two major institutions have warned the Government that the status of engineering degrees is being eroded and that a new higher education structure for engineers is now needed.

In evidence submitted confidentially to the Government's committee of inquiry into the engineering profession, chaired by Sir Monty Finniston, both the Institution of Electrical Engineers and the Institution of Mechanical Engineers have argued strongly for a new dividing line between the higher education programmes for intending chartered and technician engineers. They also want A-level entry requirements for engineering degree courses raised to attract high-calibre sixth-formers into the profession.

The IEE evidence warns: "The engineering degree, which was once normally the avenue to a career as a chartered engineer, is becoming increasingly the academic qualification of technician engineers." At the same time entry qualifications for some degree courses had fallen and consequently students had undertaken theoretical studies "that were beyond their intellectual capacity".

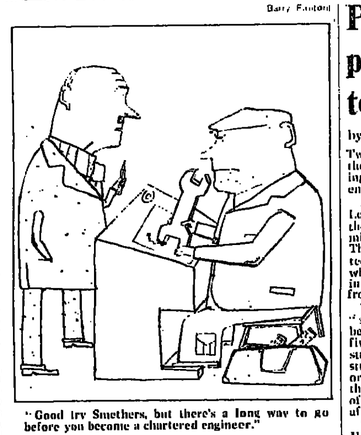
The IEE claims: "As a result many graduates with under-degrees have acquired neither a command of the theoretical knowledge needed for a basis for careers as chartered engineers nor the type of education that would have fitted them more appropriately for careers as technician engineers."

Students who in the past would have taken Higher National Certificate or Diploma courses now took degrees which "prepare them less well for employment as technician engineers. We therefore believe there is a need to introduce degree courses which are designed to develop the knowledge and skills required of technician engineers."

"There is also a need to develop extended, say four year, degree courses encompassing industrial studies, such as design, finance and project management."

The IEE puts a strong case for the development of special "elite" courses to create a relatively small number of engineers of the "highest technological competence".

Barry Fantoni



"Good try Smethers, but there's a long way to go before you become a chartered engineer."

The IMFs confidential submission recommends "that consideration be given to raising A-level entry requirements for engineering degree courses, mainly as a means of attracting brighter students but also to divert a proportion of those less gifted towards more appropriate technical courses".

It questions the controversial recommendation made last year in the British Association report that university admission requirements be changed to maths and one or more good A-level pass in any subjects. "Before such a step is taken a thorough study of the ability of an undergraduate to succeed in an engineering course without A-level physics of an extra preparatory period of undergraduate study should be made."

Arguing for earmarking "special academic establishments", the IME evidence says: "We believe there is some merit in the concept of developing certain universities or polytechnics to a recognizably high level of excellence in teaching and research; the great problem would be in selecting the ones to receive this distinction."

Polys may be penalised up to £9,500

by Peter David

Two London polytechnics may have their funds cut by £9,500 for failing to hold down overseas student enrolments.

An officers' report to the Inner London Education Authority's further and higher education sub-committee this week recommends that Thames Polytechnic and the Polytechnic of Central London, both of which have increased their overseas intakes, should have the money cut from their library grants.

The ILEA instruction to achieve "some reduction" in overseas numbers in 1977-78 was given to its five polytechnics last year as a first stage in a policy of cutting overseas students to 10 per cent of the authority's intake by 1981. An earlier threat to reduce the teaching staff of rebel polytechnics was dropped after it provoked extensive hostility.

The proposal now before the ILEA is that the extra students taken on by Thames and PCL should be disallowed in the calculation of the two polytechnics' library grants—the only part of the authority's grant aid directly related to student numbers.

At PCL this year overseas numbers rose from 947 to 1,010 and at Thames the increase was from 353 to 424. The proposed grant reductions are £3,700 at PCL and £5,800 at Thames.

The proposal has come as a surprise to the polytechnics which claim that the ILEA instruction to cut back overseas numbers came too late in the year to be implemented effectively. Dr D. G. R. Godfrey, director of Thames, said that "factors out of our control"—a higher take-up of offers of places and a reduction in the overseas student wastage rate—had caused the increase.

At PCL Mr Malcolm Orr, an assistant registrar, said that the authority's proposal to cut the library grant "could only be very short-sighted in educational terms. The idea seems to defy natural justice. The ILEA asked us to do what was scarcely possible—reduce our intakes when we were half way through the admissions procedure".

Meanwhile, the ILEA and its polytechnics have been unable to agree on a scheme to transfer teaching staff from over-staffed to under-staffed polytechnics by pooling vacancies. Under the plan, PCL and City Polytechnic would be allocated 22 extra teaching posts from North London, 15 from South Bank and nine from Thames.

Tuition fees to rise by 9 per cent

Student tuition fees are to rise by less than 9 per cent next year to keep pace with increased costs, says a Department of Education and Science Circular issued yesterday.

The circular recommends new levels to be charged for students on local authority mandatory awards in 1978-79. The fee levels were raised substantially last year, particularly for overseas students.

The circular advises authorities which introduced very substantial fee increases for part-time non-vocational courses in 1977-78 to consider any further increases carefully. Fees paid by students on courses aimed at remedying particular social and educational handicaps should be kept at a low or negligible level, it adds.

For sandwich students, local authority associations are to recommend that the full-time fee covering industrial placement periods should be scaled down to reflect the lower expenditure incurred.

The associations have issued separate recommendations for advanced courses which do not attract a mandatory award.

The projected number of overseas students for 1978-79 is 72,000, including 12,000 assisted by the Overseas Development Ministry and the Foreign and Commonwealth Office.

Recommended fees

Student category:	1977-78 £	1978-79 £
Overseas:		
University:		
Postgraduates	850	925
Undergraduates	650	705
Further education:		
Full-time: Advanced	650	705
Non-advanced	500	590
Home:		
University:		
Postgraduates	750	815
Undergraduates	500	545
Further education:		
Full-time: Advanced	500	545

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New teachers to get day off to polish skills

by Simon Midgley

All newly qualified teachers are to have one day off a week during their first year's employment to improve their teaching skills. Mrs Williams, the Secretary of State for Education and Science, announced at the North of England Conference at York University last week that the scheme would be implemented from September, 1979.

How the in-service training time is to be split up will be left to local authorities to decide. Teachers could spend up to one and a half hours a day following special induction courses either in nearby colleges or in school tutorials with more experienced colleagues.

One of the most important factors which would dominate the educational scene for the next few years was the phenomenon of falling school rolls, she said. There could be as many as two million school places surplus to requirements in 1986 if no allowance were made for closures in the meantime.

Although this could mean the closure of 10,000 schools—one in three—the government had no intention of closing so many, she said. Increased space would relieve overcrowding and might be used by nursery pupils or for students aged between 16 and 19.

Mrs Williams also spoke of a personal dream to extend part-time education to all 16-year-old school leavers for one or two years. It was a "vital target" but in terms of present economic circumstances no more than a "vision for the future".

Colleges claim resources will not meet in-service needs

The Association of Principals of Colleges (APC) has criticized the Secretary of State for Education and Science for encouraging the growth of induction and in-service training for further education teachers without making the necessary resources available to colleges.

The criticism arises from Mrs Williams's recent response to a report on the training of teachers in further education colleges, produced by an Advisory Committee on the Supply and Training of Teachers sub-committee two years ago.

The APC says that detailed study of her comments reveal "just how nebulous" the level of support offered for the proposals actually is.

In circular 11/77, "The Training of Teachers for Further Education", Mrs Williams said she regarded the in-service and induction proposals as "worthy of support in principle" and would wish to make an early start on implementing them so far as this was possible with existing resources. But there would be no scope for increasing the total numbers of academic staff in higher and further education.

In a letter to the Department of Education and Science, APC says: "Either the DES is being totally unrealistic or it envisages the redeployment of staff from the teaching of academic, professional or trade specialisms into other work, including staff training.

"Whether or not the ACSTT working party adequately considered the training resources available, their proposals envisage the teachers being trained teaching less than those who are either trained or have had longer experience.

"In days of limited and often reduced establishments college principals cannot release staff for training unless their reduced teaching duties are made up by someone else.

"More teachers thus need to be employed either on a full-time or a part-time basis. Without this extra staffing, there can be very limited release for training, and that only in areas (if any) of temporary overstaffing."

Among other things the ACSTT sub-committee report recommended that release for in-service training should be increased to 5 per cent of the further education teaching force at any time as soon as resources became available.

It also recommended that all new entrants to full-time teaching in further education who had not had pre-service training and who had less than three years' full-time equivalent teaching should take an induction course involving release for the equivalent of one day a week throughout one academic year together with block release equivalent to not less than four weeks.

Two other complementary recommendations were that new entrants who had attended a full-time one year's course of pre-service training should for the time being be required to undertake an induction programme equivalent to one day's release a week for one term and that opportunities should be available for perhaps one third of untrained new entrants to receive an additional induction training on the same scale as that they would receive in their first year.

The Secretary of State considered that it should be possible to introduce over a period the report's recommendations for induction training and at the same time make some progress towards a target of three per cent for in-service training.

Literacy groups may fall through finance gap

by Maggie Richards

Many small voluntary literacy schemes may fold because of a time-lag between the end of the Adult Literacy Resource Agency and the determination of financial policy by a new unit being established to continue the literacy campaign.

A warning of the threat to voluntary groups came this week from the National Federation of Voluntary Literacy Schemes, which says it is essential that financial allocation is worked out by the end of January, and that each scheme is informed about resources by mid-February.

But the task of allocating funds to voluntary groups has been left to the new Adult Literacy Unit, which will take over from ALRA in April.

Announcing the creation of the new unit last month, Mrs Williams, Secretary of State for Education and Science, indicated that two thirds of the unit's annual £300,000 budget would be reserved for two areas; voluntary schemes and special projects.

Now officials at the Department of Education and Science have told the federation that it will be the responsibility of the new unit to determine how much is spent on the voluntary sector.

In a statement issued this week, the federation says: "This decision is to be taken by the new unit, which as yet has no management committee or staff." Inevitable delays in establishing the new unit will threaten the continued existence of voluntary groups, it adds.

The federation is particularly concerned about the fate of small schemes in areas where there is little or no local education authority provision.

"Uncertainty about the future funding of adult literacy schemes in the voluntary sector is putting them at serious risk", it says. "If we do not know whether our schemes are to be funded in April, how can we responsibly take new students now?"

The federation is also concerned that staff may begin seeking new appointments, and that uncertainty about the future will render useless any forward planning. It estimates that £150,000 would be needed to maintain the present level of work in the voluntary sector, which represents between 5 and 10 per cent of overall literacy provision.

NUS conferences

Credit exchange is key to 16-19 group proposals

by Patricia Santinelli

New educational opportunities for 19-year-olds were proposed by Mr Peter Ashby, deputy president, at the National Union of Students Further Education Conference, held at York University last week.

Outlining a new strategy "Education for 16s to 19s—Towards a Comprehensive Education", Mr Ashby said the key to such a scheme was credit transfer. The ideal would be for students to go on Manpower Service Commission schemes for six months, then on to a further education college and from there straight on to the second year of a degree.

"This is a very exciting proposal, because it will open enormous opportunities for all 16 to 19-year-olds and is a much higher level than previously possible", Mr Ashby said.

A campaign for the education and training of all 16 to 19-year-olds and a big expansion of further education, particularly in the non-advanced sector, supported by the NUS was urged by Mr Peter Horton, chairman of the Association of Metropolitan Authorities.

"We must use the fact that the number of 16 to 19-year-olds is increasing to push forward this campaign. Other issues of importance to students such as union fees, binary division and youth unemployment can all be helped by this expansion", Mr Horton said.

He added that now was the time to fight, to plan for development for the next five to 10 years. Although there was no sign that such planning was taking place at Government level it was absolutely vital.

Announcing a major march and national lobby of Parliament to highlight the plight of the further education student, Ms Sue Slipman, president of the NUS, said the division between the university and further education sectors should be eradicated.

She warned that unless something was done to sort out the anomalies in discretionary awards, especially in non-advanced further education, there would be a decrease in the number of students with the whole problem of youth unemployment being further exacerbated.

"This will be potentially dangerous socially. Those young people who have been given nothing are those to whom the National Front appeals which is something the NUS is determined to fight firmly."

Boyle defends independence

by Peter David

The independence of the universities and their right to pursue knowledge for its own sake were vigorously defended at York University by Lord Boyle, vice-chancellor of Leeds University and chairman of the Committee of Vice-Chancellors and Principals.

In a debate at the University Policy Conference with Mr Peter Ashby, deputy president, NUS, Lord Boyle said that while universities accepted the need to become more accountable to the public they insisted on retaining complete freedom over teaching methods, appointments and promotions.

It was also essential that they remained national rather than local institutions, funded through block-grants where, as a guarantee of freedom, earmarking was kept to a bare minimum.

Earlier in the policy conference Mr Ashby had called for radical changes in the style and organization of universities to make them better able to meet the needs of society.

Claiming that there was "a crisis of ideology" in the university sector, he said that the "directionless pursuit of knowledge for its own sake" created barriers for the mass of people who never enter higher education.

To open up access to higher education, universities would have to come under the ambit of a comprehensive system of further, higher and adult education offered by local authorities. Most university courses would be at sub-degree level and the main requirement would be for vocational and part-time courses.

Mr Ashby also described as "sheer nonsense" the traditional claim that universities could provide neutral and value-free learning.

"The real issue", he said, "is to recognize that assumptions and values underly all teaching, and our demand is that these assumptions should be made explicit."

Lord Boyle, however, denied that there was a crisis of ideology in the universities. Praising successive governments for adhering to the Robbins principle that anyone qualified and willing to enter higher education should be allowed to, he warned against diluting university entrance requirements. "Any attempt to water down the A-level requirements, for example, would be asking universities to do work at a level which they simply are not designed to do."

He also took issue with Mr Ashby's "harsh views" about impartiality, truth and knowledge for its own sake. While it was true that in some subjects, notably politics or sociology, it was impossible to teach without some personal values intruding, academic reliability and intellectual honesty counted for a great deal, he said.

"In this I agree with a remark that Professor Julius Gould once made; that truth and objectivity are not just bourgeois illusions".



Lord Boyle of Handsworth.

CET campaign on technique

The great education debate has failed to highlight the central importance of teaching techniques in education, the 1976-77 Council of Educational Technology annual report states.

The council is, therefore, embarking on a campaign to develop national awareness of the need for teaching techniques to be considered on equal terms with curricular content, assessment and resources. This will be in line with proposals already made in their 1975-76 report "Educational Technology in a Time of Economic Stringency".

Another positive step proposed is to improve the council's ability to influence the thinking of decision-makers at all levels. It underlines its policy decision last July that the proposals of educational technology need to be considered at the highest level and at the earliest planning stage in education and training.

During the year under review, which saw no easing of financial pressure on the education service, the council's programme has continued to be geared towards obtaining improved results from available resources. This runs through many of its activities such as the development of a methodology for costing educational activities and a scheme for increasing the level of in-service training for teaching staff by using packaged materials.

In the report the CET also expresses hopes of greater participation in the field of adult education, to be attained through the newly formed Advisory Council for Continuing Education.

'Review part-time policy'

The Government was urged to conduct an extensive review of part-time education policy by Mr Eric Robinson, principal of Bradford College, in an address to the part-time students' conference at Loughborough University. He said the distinction between full- time and part-time education was largely artificial and based on the monastic tradition of boarding schools and Oxbridge.

"It is because of this very precious idea of the full - time student that part - time education has become the poor relation," he alleged. Part-time education was stagnant in three respects. It lacked resources, status and policy, and all financial incentives to the institutions and individuals were in favour of full-time students.

He alleged that part-time study was "to a considerable extent" an urban phenomenon. There was still major deprivation in rural areas, particularly in Scotland, Northern Ireland, the West Country and parts of Wales.

"Unlike many other countries we have never had a policy to compensate the rural area for this deprivation. It is very difficult for a farmer to become involved in it. As public transport facilities decline and become more expensive, more people are cut off."

Finally, Mr Robinson maintained that part-time education was particularly vulnerable to financial cuts. Teachers were often part-time and they were not "unionized". Faced with a cut in budget the part-time teacher was the first candidate to go.

New awards for engineering study

Three Jubilee scholarships of £500 are being offered to students of outstanding ability by the Institution of Electrical Engineers. They will be open to those embarking on a recognized United Kingdom degree course in electrical or electronic engineering during 1978.

Students who are normally resident in the United Kingdom and have conditional offers of places at universities or polytechnics should apply through the head of their present educational establishment or a corporate member of the Institution. A letter of strong recommendation should accompany their application.

From this year other undergraduate scholarships of £300 will only be offered to final year students in electrical or electronic engineering. Students gaining IEE scholarships will not suffer a reduction in their grant from local education authorities.

In addition, a small number of scholarships of up to £750 are being offered by the institution for post-graduate courses in electrical or electronic engineering. They cannot normally be used to supplement Science Research Council or other awards of similar value.

Planning teacher induction courses

A pamphlet giving advice on the planning of induction courses for new teachers has been published by the Department of Education and Science.

The pamphlet, *Making Induction Work* is designed to offer practical advice, based on the experience of pilot induction schemes for new teachers.

Many schools which adopted induction programmes found it useful to appoint a teacher tutor with special responsibility for helping new teachers, the pamphlet says.

It suggests that new teachers should be allowed at least half a day a week—and preferably a whole day—of release time.

New teachers also benefit from spending some time in the school to which they have been appointed, in the term prior to taking up their posts, the pamphlet adds.

It explains that induction schemes are valuable not only in helping new teachers become confident and competent in their jobs as quickly as possible, but also because of the beneficial repercussions on the professional development of other members of the school staff.

Making Induction Work; available free from Information Division, Room 1/27, Department of Education and Science, Elizabeth House, York Road, London SE1 7PH.

Part-time population soars

by Peter David

More than a third of all post-graduate students in British Universities in 1977 were from overseas, according to the latest volume of statistics by the Department of Education and Science, published this week.

In that year there were 48,160 overseas students on full-time higher education courses in universities, colleges and polytechnics. Some 31,300 were in universities, most 17,295 at post-graduate level. The corresponding figure for home post-graduates was 33,431. Overseas students accounted for 11.7 per cent of all full-time university students, compared with 7.7 per cent in 1970 and 9.2 per cent in 1965.

There was a substantial increase in the number of part-time students in higher education. In 1975 nearly 30 per cent (212,000) of the 727,000 students undertook part-time courses for university degrees or other advanced courses. Seven years earlier, less than one in four of the 601,000 then studying were part-time.

Much of the increase, however, can be ascribed to the Open University, where 70,000 student- help to make up the figure. If OU students are excluded the part-time total for 1975 is 163,000, which represents little change in proportion since 1970.

Of 26,300 part-timers in universities, all but 3,000 were post-graduates. Polytechnics and colleges, on the other hand, contained more than 146,000 part-time students, including over 40,000 studying in evening-only.

In universities, polytechnics and colleges alike very few women enrolled on part-time courses: they accounted for less than a third in universities and in other institutions represented only one in six of part-timers.

The figures also bear out the fears of the impact of public expenditure constraint on staff recruitment. In 1975 the number of academic staff employed in universities increased by only 0.3 per cent over the previous year. In 1974 the increase had been 2.1 per cent and in 1970 4.1 per cent.

For the first time the DES statistics include the first destinations of university graduates, and show that in 1974-75 the public service employed more graduates than any other sector of the economy. Of 27,311 entering permanent home employment 8,961 were employed in the public service; 5,935 in manufacturing industry and 4,019 in accountancy, banking, insurance or other forms of commerce.

Not much more than half the undergraduate leavers went into permanent home employment directly. Over 6,000 went into research or academic study, and 11,000 to further education and teacher training. *Education Statistics for the United Kingdom 1975*, HMSO, £6.

Would-be religious education trainees down 35 per cent

Religious education is under threat and there is a need to establish a national advisory group to recommend staffing and resource guidelines to safeguard the subject's future.

These views are contained in the latest report of the Religious Education Council, "The Development of Religious Education", which reviews the subject in the schools and the extent of religious education teacher training provision in colleges and universities.

The report, compiled after questionnaires were sent to religious education advisers, local education authorities and institutions of higher education, expresses concern about the current position of the subjects and its future prospects.

It reveals that there was a 35 per cent or more decrease in the number of students embarking on religious education teacher training courses in September, 1977; that in some areas the provision for religious education training has been halved; and that "rationalization" has been thoughtless in relation to shortage subjects where non-specialist courses are in danger of being lost altogether because of their dependence on main course provision.

The report says that many newly trained primary teachers have no initial training in religious education and that future prospects are a cause for serious concern. There had been a "sharp decline" in the number of religious education periods provided in secondary schools, the result of a "hidden shortage" of teachers "artificially concealed by statistical data."

The report underlines the need to improve the status of the subject, to provide a proper career structure for religious education teachers and to establish professional credibility in individual schools.

Colleges should have a minimum staff of four, it says, a group 10 secondary school should have at least three full time staff, every pupil aged 11 to 14 should have at least 5 per cent of the timetable for religious education and all pupils over 14 should have at least one lesson per week.

The Development of Religious Education from Mr P. Lefroy-Owen, 55 Boundstone Road, Rowledge, Farnham, Surrey, 60p plus 10p postage.

Fellowships in medical research

Nine fellowships providing financial support for science graduates wishing to study medicine and medical graduates taking science degrees were granted last year by the Foulkes Foundation.

Set up as a registered charity in 1975, the foundation aims to further medical research. In the first two years of the scheme 17 fellowships were awarded, and applications are now being invited for the 1978 awards. Details are available from Mr D. W. FitzSimons, Foulkes Foundation Fellowship Scheme, 41 Portland Place, London W1N 4BN.

Birmingham goes into drug manufacturing business

by Simon Midgley

The University of Birmingham in co-operation with a commercial business has registered its own company to market immunodiagnostic reagents now widely used as an aid in the diagnosis of spina bifida, kidney damage and tumours.

Alta Medical Ltd will use the scientific expertise of the university's department of experimental pathology and the marketing expertise of a Unilever subsidiary company. A supply agreement has been made with Seward Laboratory, a member of the Medical Division of UAC International, and will market a wide range of high quality reagents.

The agreement means that the knowledge and skill of many years' research by the department will be used to initiate new work in the field by means of money gained from industry. The capital funds needed to expand development, basic research and quality control could not be provided by the Medical Research Council or the Department of Health. They agreed that an agreement should be negotiated with UAC International.

Immunodiagnostic reagents are used to detect and measure concentrations of individual components of the blood to assist in the diagnosis of particular illnesses.

When animals are injected with blood or tissue components from a different species they respond by producing antibodies which can be removed by withdrawing a sample of blood. An anti-serum—the fluid part of the blood containing the antibodies specific to the injected material—can then be prepared.

The anti-serum can then be used to detect and measure the specific blood component concentration in other patients, for example, in a diagnostic test which involves an immune reaction.

One example of the way in which the reagents can be used to help detect illness can be found in the diagnosis of spina bifida in pregnant mothers.

Normally, small quantities of a particular protein, Alpha Feto Protein, are produced in the embryo. In spina bifida cases it is also found in the fluid surrounding the embryo, some of which escapes into the mother's circulation.

In order to detect and measure the presence of this particular protein a specific immunodiagnostic reagent can be used.

The preparation in animals of specific antisera to human blood and tissue components and the assessment of their value in clinical tests has been a developing aspect of the department's work for 15 years.

Until recently it has been pioneered by a small group of technicians headed by Mr R. L. Drew and Dr David Cory, senior lecturer in the department, with the financial support of the MRC.

Aberdeen bequest

A chair of ophthalmology is to be established at Aberdeen University through a benefaction from Mr Charles Cockburn, a former consultant-in-charge of the eye departments of Aberdeen Hospitals and a university lecturer.

New Year Honours

F. R. Leavis became a Companion of Honour and Professor Oliver McGregor received a life peerage in the New Year's Honours. They did not receive knighthoods as stated in a picture caption in last week's *TIMES*.

Teachers sample industrial life

Four teachers from Leeds, Warwickshire, Essex and Croydon took up their first teacher fellowships in engineering this week in a new move to foster increased understanding between industry and the world of education.

On Monday they began a one-week introductory course at the National Centre for School Technology in Nottingham to prepare them for an eight-week working stint in industry. This will be followed by a further week in Nottingham before the Easter holidays.

The engineering fellowship project was initiated by the Institution of Mechanical Engineers in conjunction with the Institution of Electrical Engineers. The scheme has been developed to enable teachers to experience at first hand what industry is all about and to use the knowledge gained to enhance their teaching.

It will give teachers involved in curriculum planning experience of the practical uses to which the subjects they teach are put and industrialists the opportunity to emphasize the skills they want when offering employment to new staff.

In particular it is hoped to improve understanding and knowledge of mechanical and electrical engineering in schools and to define the role of the professional engineer in society.

The fellowship is worth £750 per teacher. Of this, £300 is payable through the local authority to the teacher's school on completion of the fellowship. The balance of £450 is designed to cover the two weeks of formal training in Nottingham and travelling and out-of-pocket expenses.

The response to the project from local education authorities and from industry has been enthusiastic and it is hoped to award three times as many fellowships this coming September.

As a result of their experience it is hoped that teachers will be able, with more authority, to assist in curriculum development not only in their own schools but also in their local authority areas as a whole.

The project organizers also feel that the teachers should be better placed to advise on careers and to act as a focal point for liaison between the local authorities and industry.

Mr Foot and DES examine anti-Jewish activity

by Judith Judd

The Privy Council Office is considering whether anti-Zionist activities in universities constitute a breach of their charters.

Mr Michael Foot, Lord President of the Council and Leader of the House of Commons has written to Mr Eric Moonman, M.P. for Basildon to tell him of the move.

In the letter he said he deplored anti-zionist and anti-Jewish activity and added "the question of whether or not these activities constitute a breach of the charter and statutes of the university concerned is a matter of resolve. My office is considering this in consultation with the Department of Education and Science."

However, Mr Foot said he felt the problem could be dealt with most effectively by students themselves. The campaign to get student unions to ban Jewish societies and withhold funds from them appears to have subsided recently.

The National Union of Students voted to suspend any unions who voted to ban such societies and most student unions which passed motions of this sort have now rescinded them.

Mr Moonman said that despite the NUS resolution and the success of the Union of Jewish Students in some universities there was still a tremendous battle to be fought.

"The issue is no longer the exclusion of zionist societies, but alas, often concealed anti-semitism. Many vice-chancellors have been correct in their statements on this issue but others have been far too discreet."

Mr Andrew Lindon, field officer of the Union of Jewish Students said he was concerned about anti-semitic literature which was circulating in some universities. Though last year's attack on Jewish Societies appeared to have died down, the union wanted to prevent any future attacks.

This term it would be trying to reverse an anti-zionist motion which was still in force at the Polytechnic of North London. Mr Moonman asked the Privy Council to look at the question of university charters many of which include clauses saying that no-one should be discriminated against on grounds of religion, race or politics.



Mr Foot—Lord President of the Council.

Scots dons want advisory HE council only

by Willis Pickard

A council for higher education in Scotland has been welcomed by the Association of University Teachers (Scotland) but only as an advisory body with no executive or financial power.

This is the AUTS response to the proposal in the 1976 White Paper on devolution, though the policy would hold good without devolution.

The AUTS envisages a body of not more than 40, a quarter of whom would be drawn from the Scottish universities and another quarter from the colleges of education and the central institutions. Other categories—the Open University in Scotland, further education colleges, specialized colleges, other adult education institutions and secondary schools—would be entitled to two members each, and there would be "institutional" representative and a member of the appropriate staff association.

In addition, the TUC and the CBI in Scotland would appoint a member each and there would be two student representatives. Central bodies—the Department of Education and Science, the Scottish Education Department, the University Grants Committee and the Council for National Academic Awards—would be entitled to have an assessor each.

The AUTS is keen to sort out the ambiguity in the white paper, which speaks both of "higher education" and "all parts of the post-school system". It says the council should deal with relations between institutions offering degree or degree-equivalent courses, and it should aim to preserve academic standards and their active cooperation is essential.

"Teacher training is bedevilled by the fact that a great deal of what is done in colleges has little or no bearing on practical problems which confront teachers in schools while what is carried on in schools in the name of education practice is seldom subjected to rigorous analysis or critical appraisal."

Training courses were rarely planned corporately by main subject tutors, educational studies tutors and serving teachers. In consequence students were confronted with different sets of assumptions and values about the job they were to do.

OU introduces new procedures on copyright

Two marketing companies serving the Open University have introduced new copyright procedures covering film and video programmes in a bid to clamp down on pirate copying.

The procedures have been drawn up by Open University Educational Enterprises Limited, the Open University's own marketing company, and the other distributor of Open University material, Guild Sound & Vision Limited of Peterborough.

One of the new procedures will apply mainly to the United Kingdom market. A fee of 25 per cent of the list price will be charged for unlimited copying of each Open University title purchased from either company for a period of one year.

The alternative procedure offers copying rights for three years, and involves a sliding scale of fees according to the number of copies required. It has been designed principally for use abroad, particularly in developing countries.

The OUEE's media division general manager, Mr Nick Freethy, explained: "In a vain attempt to use television to the full many people have been tempted to break the law. This is patently bad from all points of view—the pirate copier and his institution face possible prosecution, and the producer is denied the right to a reasonable return on his product."

Many higher education institutions and local education authorities were now aware that it was not merely the individual pirate copier who risked prosecution, but the institution or authority itself, he added.

'Back to classroom, tutors'

Tutors in teacher training colleges must have much closer contact with practising teachers if their students are to get a clearer picture of the realities of teaching and gain competence in classroom techniques, Mr Eric Saunders, of the Northern Ireland Polytechnic, told the inaugural conference of the British Council for Physical Education at Coventry last week.

He said: "Although the final mandate for training the students for entry into the profession remains with college staff the views of experienced teachers are equally important. Their opinions form an important and influential basis for the identification of curricular skills

Britain 'a renegade' on overseas student fees

by June Feinmann

An impassioned plea for the Government to abolish student fees in universities was made last week by the vice-chancellor of Bradford University.

Dr Ted Edwards said the move would be a solution to the enormous discrimination against overseas students, particularly those from the Third World, caused by the increase in their fees last year.

Speaking at the annual conference of the World University Service at the Royal Holloway College he argued that, when Britain decided to create a differential between overseas students and British students, she had stepped out of line with the major industrial countries of the world. In Europe, for instance, only Austria and Ireland charged more than negligible fees.

Dr Edwards, whose university has stood alone in maintaining the parity between overseas and British student fees, said that at stake was one of the major confrontations of our time—that between the free exchange of knowledge throughout the world and the compelling of knowledge which in the past had led to international friction, enmity between nations and war.

"The major characteristic of the recent huge growth of world knowledge is that it has depended entirely on an international free trade. When we speak about the cost of universities, as is nowadays fashionable, we are apt to forget that the major part of the cost is not made in the universities of a particular country. The knowledge they teach or extend has been discovered in the greater part in the other laboratories and libraries of the world.

"It is one of the most precious examples we have of the possibility of human cooperation across all boundaries of race, religion or nationality. Any major threat to this relatively recent but immensely valuable human tradition would be akin to entering a new period of the Dark Ages", he said.

Dr Edwards argued that this world view was the only proper background to the issue of overseas student fees, and that the Government could not justify the high fees on economic grounds.

The kind of sum that was involved in the so-called saving by the recent rise in fees was perhaps of the order of 1 per cent of the total expenditure in universities and endless discussions as to whether the 1 per cent might be made .75 per cent or 1.25 per cent had followed. "But if this kind of sum represents the thing we argue about in terms of the international problems I have discussed, then our chances of working towards the kind of international understanding which might save us from a world disaster are slight," he warned.

The British Government's current policy on overseas students' fees was now, he believed, one of "positive discrimination" in which students from richer countries would be charged very much higher fees which would be used to subsidize students from poorer countries.

He claimed that even if the tremendous problems involved in giving such subsidies were ignored, this government policy was still virtually unworkable.

"If we discriminate against rich Common Market countries, what will happen to the many British students who go abroad for essential parts of their education, and



Dr Ted Edwards—'scrap fees system'

is this kind of discrimination compatible with our membership of the Common Market?"

"If we discriminate against the United States, should we then with due modesty refuse the inputs from the American Foundations into our own British educational efforts? If we are talking about the oil rich countries, then it would be legitimate for non-oil producing countries to charge even higher fees to us than we do to them."

Dr Edwards said there was indeed a place for positive discrimination in favour of the poorer countries. But it should be done by giving greater and greater amounts of aid to poorer countries to help them make their own decisions and face the much larger problems of international, social, cultural and economic reorganization that were at the heart of this matter.

The worst way of doing it was to decide for them what particular commodity of ours, such as education or anything else, should be the subject of our weighing and measuring, he said.

Scots split on devolution and universities

by Sue Reid

Scottish universities should continue to be financed through a London-based University Grants Committee rather than an assembly in Edinburgh, Professor W. Frend, chairman of the Association of University Teachers in Scotland, said last weekend.

At a conference examining the whole future of tertiary education in Scotland he argued against devolving the universities. There was a need for research to be on a United Kingdom basis and controls over universities should be "as remote as possible".

"Let us keep away from the control of the modern barons—politicians and their ilk", warned Professor Frend, opposing the viewpoint of Mr John P. Mackintosh, Labour MP for East Lothian and part time professor of politics at Edinburgh University.

Mr Mackintosh was adamant that in the event of devolution the Scottish assembly should have within its ambit the universities as well as the other areas of higher education. Dr Nigel Grant, newly appointed professor of education at Glasgow University, agreed.

Earlier Mr Mackintosh claimed that the "supposed panacea" of a tertiary council to rationalize the system posed its own problems. Such a council would need funds and would need to include universities. It would, he warned, be beyond the power of a small body to assess the institutions and their courses and impose some sort of rationalization. The members' discussions might culminate in ad hoc decisions rather than those based on educational requirements.

But Professor Baillie Ruthven, principal of Moray House College of Education, maintained that a tertiary council could ensure that decisions to rationalize or diversify were made on the basis of educational necessity regardless of politics. It would, he argued, extend existing cooperation between institutions.

The mess which the Scottish colleges of education now found themselves in was the result of inadequate early planning.

Give medical engineering more support, SRC told

by Peter David

An increase in Science Research Council support for research in the materials field of medical engineering is recommended in a council working party report published last week.

The report points out that there is a large and growing world market for medical and dental devices and equipment in north America and Europe, where significant contributions have already been made for new materials, especially synthetic polymers.

In the UK interest in medical engineering appears to be growing, the report says, but it is fragmented in universities, polytechnics and hospitals, funded variously by the Science Research Council, the Medical Research Council and the Department of Health and Social Security.

It recommends the establishment of a small number of large research centres capable of undertaking collaborative, multi-disciplinary research involving scientists, engineers and clinicians with the necessary equipment and facilities.

The report finds that the current level of spending in the field is inadequate. In medical engineering as a whole annual expenditure by the SRC is running at £90,000 compared with a combined annual expenditure by the MRC and the DHSS of £1,500,000.

An increase in SRC funding to £400,000 is recommended over two years.

'Keep universities in teacher training'

by Simon Midgley

A plea for the preservation of the university role in initial and in-service teacher training was made at the National Union of Teachers national education conference in London last week.

Professor Gerald Bernbaum, professor of education at the University of Leicester, said that it was "vitally important for the whole standing of the study of education and for the development of the teaching profession in what is going to be a very, very difficult time that there is a university connexion and that this is not submerged for what I would regard as temporary, local political purposes relating to the late 1970s".

Referring to "a feeling abroad" that the number of initial teacher training places allocated to the universities should be reduced, he said he felt this could have serious consequences for the universities.

He pointed out that even if all the 5,000 university postgraduate certificate of education places were to disappear this would do virtually nothing for the problems of initial teacher training in the public sector.

Professor Bernbaum also said that such a move would break the link the universities had with teacher training generally because it would be impossible to sustain any other kind of teacher education work in the universities without the initial teacher training element.

Discussing the increasingly important role that the development of in-service training work was likely to play in education departments in future, he said that there were signs that some local education authorities for political, financial and emotional reasons were encouraging their teachers to attend polytechnic or college in-service courses rather than university courses.

"Some local education authorities are already pushing their teachers towards their own institutions. If that was so happen I think it would have profound implications for the universities and for the training of teachers and the standing of the study of education."

It would be dangerous because it limited the freedom of choice of individual teachers and more importantly, because universities rather than polytechnics were more likely to provide an independent forum of discussion apart from the influence of teachers' employers and local authority advisers.

If polytechnics were to acquire the lion's share of the in-service training work, the price would be fairly tight control by local authority education advisers.

In future because of the no-growth policy in initial teacher training, the only growth area available to either polytechnics or universities was that of in-service training, Professor Bernbaum said.

His view was that in-service training and the demand for further teaching qualifications would develop rapidly in future as a means of advancement within a relatively stable teaching force.

It was important to beware of local authority and head teacher control of teacher education, he said, in the sense that people who worked in the teacher education field knew that local authority and head teacher ideas of what counted as relevant were not necessarily always appropriate.

At the moment non-university institutions were not involved in in-service training work to any great extent, he said, but they were clearly going to become more involved in future.

A highly competitive situation could develop with polytechnics and universities offering a variety of in-service training courses, providing a free market was allowed to exist.

Train tutors to counsel—report

by Judith Judd

Academics give pastoral work a low priority and their students feel they are not interested in them, according to research published this month. These are some of the results of an inquiry into how university members see the pastoral role of the academic carried out by Mr Barry Bashley and Miss Angela Shepherd of Hull University's department of social administration.

In an article in the *British Journal of Guidance and Counselling* they say that if higher education institutions are concerned to pay more than lip service to the pastoral tradition they must recognize that only some of their staff are able and willing to take on a pastoral role.

Such academics should be carefully selected, trained and rewarded for their special responsibilities says the article and it calls for a revival of the pastoral tradition. "If academic staff are to continue with pastoral work, it should be placed on a very different footing." One solution might be to have a few "counselling tutors" in a department instead of a lot of supervisors.

This proposal would meet two of the criticisms disclosed by the inquiry. "While a pastoral role may legitimately and realistically be expected of some academics, it is quite illegitimate and unrealistic to expect it of them all." In addition, both parties should want good pastoral relationships.

The researchers asked students and staff in one English university how they viewed personal tutoring arrangements under which each student was allocated to a supervisor who was a teaching member of his own department. Unlike the academics, the students were overwhelmingly in favour of a system in which academics would volunteer for supervisory duties.

Mrs McIntosh converts to national gas

Mrs Naomi McIntosh, a pro-vice-chancellor of the Open University, has been appointed chairman of the National Gas Consumers' Council, which will make her the only woman member of the Energy Commission.

Sir Arthur's three point plan for financial recovery

Universities will be irrevocably damaged by short-term cash cuts, Sir Arthur Armitage, vice-chancellor of Manchester University, says in his foreword to the annual report. He calls for a policy which would maintain confidence and morale in universities and proposes a three-point plan.

- University teachers' pay anomaly should be righted in accordance with common justice and the contribution they make to the country.
- A review of the government's policy on tuition fees is needed. The present high fees pose a direct threat to the future of postgraduate studies.
- Enough money should be provided to allow universities to maintain their standards. "The universities can and do make a vital contribution to the nation—they seek only the means to accomplish their task."

He says that on any criterion —unit costs, staff/student ratios, capacity planning, international comparisons — British universities are low cost institutions.

In a speech to Manchester University's Court last week, Sir George Kenyon, chairman of the council spoke of a resurgence of public confidence in universities.

On Manchester's own development, he said that it had shown the largest expansion of any university in the United Kingdom apart from the federal ones. In the last five years numbers rose by 22 per cent.

Mr Norman Quick, the treasurer, told the court that the university was "sailing a little close to the wind" financially. It had finished the year with a surplus of £38,479 on an income of £32m, but the margin between success and failure was slender. Last year there had been a deficit of £300,381 and a deficit of more than £200,000 was expected in 1977-78.

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North American news

Carnegie urges major curriculum rethink

from Clive Conlon

WASHINGTON

American colleges and universities, for all their diversity, have until recently had undergraduate curricula bearing recognizable common features. Now even this element of similarity has disappeared. That is one of the most striking conclusions of a major study by the Carnegie Foundation for the Advancement of Teaching.

The report, which has been in preparation for two and a half years, draws on national surveys of staff and student experiences and opinions, analysis of hundreds of college and university prospectuses, visits to scores of institutions and the advice of a battery of consultants.

Its overall aim is to draw attention to the undergraduate curriculum, an area which it says is suffering from neglect in most institutions.

The report says universities and colleges should formulate curricular policies for the institution as a whole. It suggests that "one place to start is by considering the mission of the institution".

General education, consisting of institution-wide requirements designed to assure that all students "obtain some of the breadth of knowledge, ideas and culture once offered by liberal arts colleges in America", has been eliminated from some undergraduate curricula. At the other extreme, a few colleges still consider all their courses integral parts of general education and require all students to take them. In between is a complete range of practices.

The lack of concern about the curriculum noted by the foundation may be due to a general feeling of satisfaction with the way things are, both on the part of students and of their teachers.

Surveys for the report showed that more than 90 per cent of faculty members at all types of college and university say their institution is a "very good place for me" or "fairly good place for me".

Seventy-two per cent of American undergraduates claim to be "satisfied" or "very satisfied" with their colleges. However, questions, specifically about the quality of teaching showed that students at less prestigious institutions where fewer teachers have PhDs are happier than those at the elite research universities.

At liberal arts colleges 79 per cent of students are satisfied with the quality of their tuition, and at community colleges 76 per cent are satisfied—compared with 65 per cent at research universities.

These findings suggest the need for alternatives to the research-oriented PhD as the degree for college teacher, the report says. A new form of doctorate, such as a Doctor of Arts degree, should be made widely available. It should be given equal status to the PhD.

Undergraduates are much less hazy about the way they are evaluated or graded than about their teaching or the overall quality of their college. At the top universities only 44 per cent are satisfied with the way their work is assessed; at community colleges and liberal arts colleges about 60 per cent are satisfied.

General education is described as a "disaster area". The foundation wants to improve it by placing more emphasis on the cultivation of "advanced learning skills" in English language and mathematics.

"If colleges cannot define what they intend to accomplish in general education, cannot specifically describe how it will benefit the students who engage in it and cannot deliver an effective general education component, they should seriously consider eliminating it entirely", the report says.

The "major", on the other hand, is generally well handled by academic departments. But it is not an unqualified success. Three key weaknesses identified by the study are: majors are too "oppressive", because they take up too much of a student's time, they are too narrow and overspecialized and they cause students to neglect courses for non-majors.

The third component of American undergraduate education, electives, has been expanding in recent years at the expense of general education, as a result of student "consumerism". The report suggests the time has now come to reverse the trend. Electives are in many cases an uncoordinated waste of students' time, it says.

Today each of the three components—general education, the major and electives—takes up exactly one third of the average undergraduate's curriculum. The trio are seen as the legacies of three historical eras over which American higher education has developed.

General education is left over from the classical liberal curriculum that marked the first era from 1636 (the foundation of Harvard) to about 1870. Majors came along with the second period of concentration on production-oriented educational pursuits, which lasted from 1870 to the 1960s. Electives are the hallmark of the current period when the curriculum is being shaped by students as consumers.

The report suggests designating a limited number of faculty members as "master teachers". They would serve as models of teaching ability, provide guidance for new staff and serve as consultants to all members of their department with specific teaching problems. They would be paid extra for their work.

Yale finally chooses its new head

After a well-publicized and sometimes embarrassing nine-month search, Yale University has found a new President to succeed Mr Kingman Brewster. He is Dr Angelo Bartlett Giamatti, a 39 year-old professor of medieval and renaissance literature, who is currently chairman of humanities at Yale.

Although Professor Giamatti has been hailed as Yale's first "ethnic" President, his ancestry is only half Italian and he has a traditional Ivy League background. He got his undergraduate and PhD degrees at Yale and has taught English there for all but three years of his academic career.

The Yale Corporation, the university's governing body, tried to keep the deliberations of its Presidential Search Committee secret, but they constantly leaked out into the press. At least three men are said to have turned down the post.

The most embarrassing refusal was that of Dr Henry Rosovsky, dean of the faculty of arts and sciences at Harvard. Dr Rosovsky said he declined the opportunity to become Yale's first Jewish President because he was too deeply involved in major projects at Harvard, including a big campaign to raise the standards of undergraduate teaching there.

The historian Dr Hanna Gray who, as Provost of Yale, has been acting President since Mr Brewster's departure for the American embassy in London last spring, was in the running to take over as permanent President. She has just been appointed, however, President of the University of Chicago.

Dr Giamatti will become Yale's eighteenth President at a time when the 276-year-old university is in serious financial difficulties. Its current fund-raising drive has fallen well short of expectations and the operating deficit over the past decade has been more than $16m.

Educationally, Dr Giamatti is rated a conservative. He was involved, for example, in an unsuccessful attempt to introduce intensive writing courses at Yale in place of a series of seminars by outside speakers.

Today's college students, he wrote in *The Washington Post* in 1976, "have lost touch with the English language." They arrived at university "often completely lost about how to cope with their work, with their time, with themselves".



Dr Giamatti

Tax credit proposal for parents runs into difficulties

from our own correspondent

WASHINGTON

The idea of allowing students to claim a percentage to offset part of their parents' tuition overall, according to the CPC. The biggest gain, 23 per cent, is at the MSc and PhD levels.

Demand for business and accounting graduates is beginning to slow down as the supply of candidates continues to grow rapidly, but there will nevertheless be a 6 per cent increase in jobs for those with business-related Bachelor's degrees and a 9 per cent increase at the Master's level.

As expected, the job market is weakest for humanities and arts students. Here, however, the federal government is likely to come to the rescue. The Civil Service, one of the largest employers of non-technical graduates, hopes to recruit 23 per cent more people this year, following a sharp cutback in 1977.

Without these openings in the government and its agencies, the number of jobs for non-technical graduates would have decreased slightly, the CPC says.

Starting salaries for new engineering graduates average $16,680 a year, Dr Endicott found. The average computer scientist can command $14,460.

Another survey, covering 416 employers, by Mr John Shingleton, placement director of Michigan State University, showed that starting salaries for engineers had more or less kept up with the 7.9 per cent average annual rise in retail prices over the past decade. But the starting pay of arts graduates had risen by only 4.4 per cent a year.

Computer science, the other big

Political motivation denied in axeing of Rhodesian students

Carnegie-Mellon University has dropped eight out of 25 black Rhodesian students from a controversial Master's degree programme in public administration.

In the autumn 19 of the 25 students signed a public statement alleging that the course was invented "to create a nucleus of prowestern puppets to stand as a stumbling block against the authentic cause of our people's revolution".

The university denied that the programme was politically motivated. It was set up last summer with funds from a Rhodesian foundation and several United States corporations to provide black Rhodesians with the managerial skills that will be needed if and when a black majority government takes over their country. According to Carnegie-Mellon, both the Smith regime and its opponents inside and outside Rhodesia supported the scheme.

A university spokesman said the eight were asked to leave solely because their academic performance was not up to the required standards. The usual first year dropout rate in Carnegie-Mellon's Graduate School of Urban and Public Affairs is 10 to 15 per cent.

The dean and other officials of the school have now succeeded in convincing the remaining 15 Rhodesians that their allegations of political bias on the programme were groundless, the spokesman claimed.

The university will help place their eight colleagues in other American colleges or even on different courses at Carnegie-Mellon, if they want, or else pay their fares home.

Carnegie-Mellon has not yet decided whether to recruit a second batch of Rhodesians for the programme, which cost $300,000. The students were selected in Rhodesia from 200 who attended a special mathematics and communications course last summer.

First degrees should 'be stricter'

A special task force of the American Association of State Colleges and Universities has urged member institutions to redefine the content and scope of their bachelor's degrees.

The task force, led by Dr Glenn Dumke, Chancellor of the California State University and Colleges system, calls for stricter qualifications in English, mathematics, United States and world history and economics.

McGill vc to retire

Dr Robert Bell is to retire as principal and vice-chancellor of McGill University in Montreal in June 1979. He will resume his academic duties as Rutherford professor of physics.

Sporting handicap

The faculty of arts and sciences at Tulane University, New Orleans, has voted 101 to 10 to ask the university to "de-emphasize big-time athletics", because sport was draining Tulane's scholarship funds.

Australia

Fixed-term contracts come under fire

from John Kirkaldy

SYDNEY

Britain will become part of a campaign by Australian academics to abolish fixed-term appointments in their country's universities. Advertisements have already appeared in Australian newspapers warning job applicants for university appointments of the pitfalls of the fixed-term system. This month the campaign is being extended to Britain through an advertisement in the *TIES*.

The advertisements have been placed by the Federation of Australian University Staff Associations (FAUSA). They warn applicants "to check carefully the nature of any appointment which may be offered". They also emphasize job seekers should confirm whether any position is tenurable, as a number of advertisements, they claim, have been misleading.

The federation advises that, although fixed-term positions may be renewable, there is no guarantee that this will happen. Renewing of fixed-term positions may, the federation warns, have nothing to do with merit or ability.

Mr Les Wallis, general secretary of FAUSA, said that his association knew of cases where potential applicants had received assurances (usually verbal) that fixed-term positions would be extended or converted, only for the assurances to be later denied.

The federation is opposed to the principle of fixed-term appointments as a matter of policy. Mr Wallis commented: "Fixed-term appointments are a negation of academic freedom. They mean that academics are less likely to participate in the full range of academic functions and their insecure status will mean that both their work and research will suffer." FAUSA supports fixed-term appointments only for large leave replacements and replacement of temporary seconded personnel.

An uncertain future and economic cutbacks in growth have meant that the incidence of fixed-term positions is increasing in Australian universities. In 1973, 86 per cent of Australian academics in universities of lecturer or above status had tenure; in 1976, the figure had dropped to 83 per cent; and now FAUSA claims that it is about 80 per cent.

The present situation is that a newly appointed academic whose job is tenurable has his or her situation reviewed after three years by a probationary review committee of the university concerned.

Fixed-term positions almost invariably occur at lecturer level: higher positions of senior lecturer, reader, associate professor and professor are almost certainly of tenurable status.

Lower grade jobs, such as tutor and senior tutor, are generally without tenure and almost always for a fixed period, ranging from one to five years.

The percentage of fixed-term appointments at lecturer or above levels varies considerably at different universities. FAUSA claims that at Melbourne University the figure is nearly 50 per cent and that it is similarly high at Monash University.

The debate is of particular interest to British academics, as they have always constituted a major source of overseas recruitment for Australian universities. This has been reinforced by the economic climate in Britain and the higher financial rewards in Australia. Professors earn about A$30,786 (£18,658) and the higher salary picture is repeated at all grades. Data on higher cost of living, Australian academics are often considerably better off than their British counterparts.

Republic of Ireland

Grants rise 'lags behind inflation'

from Paul McGill

DUBLIN

Student grants are to be raised from a maximum of £350 to £500, backdated to the beginning of this academic year.

Announcing the change, Mr John Wilson, Education Minister, said that the £50 increase granted by the coalition government last January was "altogether inadequate" and that he proposed to add another £150.

The rise would cost £1m, he said, but the new government would also have to foot the bill for the earlier £50 increase, because the coalition made no financial provision for it before going out of office last summer.

The Minister did not change the means test, under which the maximum award is reduced if parental income exceeds £2,265 a year. He gave no commitment to raise the threshold next year but added that he was "moving in that direction".

The Minister said: "There is no advantage in being within the eligibility limits for an award if the amount of the awards is not sufficient to enable the student to take advantage of it. I have no doubt that the level of the grants in recent years has been such as to create a situation where students who would have qualified for grants on the basis of academic and financial means criteria had to forego the opportunity of taking up such grants."

The increased grant fell far short of the demand of students who had organized a national campaign in favour of greater educational expenditure. The campaign reached a climax the same week as Mr Wilson's announcement, with large demonstrations in the three university cities and smaller protests in places as far apart as Letterkenny in the north and Tralee and Waterford in the south.

The Union of Students in Ireland said it was pleased that its activities had produced a response from the government, but complained that £500 did not bring the grant into line with inflation. The union has been seeking a figure of over £800, combined with a means test threshold beginning at £5,000, to restore the position existing in 1968 when grants were introduced.

There is disappointment, too, that the Minister has not extended the scope of the grants scheme. At present four honours are needed in the Leaving Certificate examination to qualify, with the result that less than 30 per cent of all students receive any grant at all.

West Germany

R & D takes increased share of public expenditure

by Günther Kloss

In preparation of the federal government's Sixth Federal Research Report (*Bundesbericht Forschung VI*) due in the autumn, Bonn has published a preliminary fact-sheet.

The publication lists public and private research and development expenditure, and breaks it down by its three chief users—industry, universities and special research institutions.

It quantifies public expenditure according to the federal government's chief research policy objectives and describes all important government and private bodies concerned with the support of research and the research establishment outside the university sector. There is also a separate statistical section.

In 1977 Federal and *Länder* governments on the one hand and industry on the other spent roughly equal amounts on research and development, DM13,250m (£3,300m) and DM13,200m respectively. The average annual rate of growth of this expenditure item between 1962 and 1977 was an impressive 13 per cent, although it slackened to 5.3 per cent between 1976 and 1977.

As a result, the share of all R and D expenditure, expressed as a percentage of the GNP, rose from 1.3 per cent in 1962 to 2.3 per cent in 1976. This is in contrast to the United States and Britain where, as the report points out, R and D expenditure appeared to show a slight downward trend.

On the other hand, however noticeable the increase of West German R and D expenditure as a percentage of total public expenditure may be (from 2.1 per cent in 1962 to 3.4 per cent in 1976), the striking fact remains that public R and D expenditure expressed in absolute figures as European Community units of account was in 1976 only about half of what Belgium and the Netherlands spent and a mere two-fifths of the allocation of each of the Republic of Ireland, Denmark and Great Britain.

German industry spent almost all its research and development resources internally: only DM100m go to universities and DM200m to research establishments. The bulk of the *Länder* governments' allocation naturally goes to the universities whose running costs are under the German federal system exclusively borne by them: (DM4,700m in 1977 out of a total of DM6,000m). The federal government's contribution, which exceeds that of the *Länder* (DM17,300m in 1977) is divided between private industry (DM3,300m), non-university research establishments (DM3,500m) and universities (DM500m).

Some 99.2 per cent of federal research and development expenditure is directed towards an area broadly defined as "the modernization of the economy", which includes the top priority goal, the safeguarding of energy and raw material supplies.

The allocation under this particular sub-heading had shown a steady if moderate increase from 1972 to 1977, from 20.5 per cent to 21.2 per cent expressed as a percentage of total federal R and D expenditure, or in absolute figures from DM1,066m to DM1,547m. It is projected to increase further to 23.5 per cent of the total by 1980.

Israel

Colleges launch sciences drive

from our correspondent

JERUSALEM

Israel's universities are looking for students in the natural sciences. At least two have announced special courses for retraining prospective candidates from among students already at university or from those about to take up university studies in the 1978-79 academic year, but who did not take natural sciences at school.

One reason for the plight of the natural sciences is that the impact of the social sciences has finally come to be felt in Israeli universities as elsewhere. Another is that it is more difficult to find a job with a degree in the natural sciences than with one in the humanities or social sciences. A third possible explanation is the present lack of prospects for all but the most outstanding to get an academic post in Israel in the natural sciences.

The retraining courses are in addition to the remedial pre-academic courses and the refresher courses offered by all the universities, and the remedial second-chance courses which are being offered now also by Everyman's University (in English and maths) and increasingly by first degree-awarding colleges.

Meanwhile, the universities are waiting for the announcement of their allocations for the 1978/79 academic year.

The Planning and Grants Committee, Israel's UGC, is warning against measures likely to endanger the quality of higher education and research.

The PGC is going on with a number of measures of financial aid to the universities from the resources at its disposal. It has given an allocation of 3m Israeli pounds to each university to help it recruit new blood.

It has allocated a similar amount to a fund, which it has established to encourage university scientists to engage in what is called basic-applied or infrastructural research for and with industry.

Malta

Labour seeks to bring in student-worker system

by Carl Slevin

Tension between the University of Malta and Mr Dom Mintoff's Labour government now centres on a plan to restrict entry to higher education to candidates who already have a job and whose employer or trade union is willing to sponsor them.

The scheme, as currently proposed, envisages most student-workers alternating six-month periods of study with equal periods of work although it is recognized that some courses will require a different pattern.

Teacher training, for example, would consist of two years' full-time study followed by one year full-time work and then one further year of study.

Where student-workers are employed by the Government, it will continue to pay wages during the study periods, but the financial commitment, if any, for private employers has not yet been decided.

The Government presents the scheme as a long-term structural reform, tailoring higher education to fit the requirements of the Maltese economy as well as breaking down what it sees as a bias in the present system against working-class children.

Critics see it much more as a reaction to immediate events, primarily the Government's varied disputes with the Confederation of Malta Trades Unions, and, in the long run, simply an attempt to stifle the university as an independent information and opinion base in Maltese society.

Taking the educational proposals as such, the Malta University Teachers Association has produced a draft report on ways of implementing Government policy. It accepts that a much larger proportion of the population than the present 7 per cent should be given the chance to enter higher education but sees this as useless if it simply means increasing the output of graduates in existing courses.

A tiny economy like Malta cannot afford to take the view that excesses and shortfalls will cancel each other out over space of time. What is required is a sophisticated Planning and Advisory Unit to advise on manpower requirements, and a sufficiently flexible system of higher education to respond year by year.

The UTA's report emphasizes that the student-worker idea should not be imposed rigidly and that it does not require everyone to study and work in alternate periods.

Additionally, a working paper submitted to the Government by the Students Representative Council accepts the proposals of the UTA and points out that any purely materialistic view of education is bound to disregard its role as a civilizing and humanizing force.

Apart from this, the SRC paper takes a very much more overtly political line which is clearly related to the present troubles in Malta. The idea of sponsorship is rejected because it would replace the old privileged class based on wealth and family with a new one based on party membership and unwilling to those in power. Such a system would also discriminate severely against women, especially in a predominantly Roman Catholic society such as Malta.

In practice, because the Government, including the various parastate bodies which it controls, is the majority employer in Malta, a large proportion of students would have to rely on it for sponsorship. In addition, given the sorts of jobs for which they would be qualified, the trade union to which a student-worker would almost certainly belong if he were privately employed would be the General Workers Union which is affiliated to the Labour Party.

The students' fears are intelligible in the light of the dispute between the Medical Association of Malta, a member of the Confederation of Malta Trades Unions, and the Government. Maltese doctors have been on strike since June and hospitals have offered only emergency services with the help of 30 or so Arab and East European doctors seconded by their governments.

One by-product of this situation was the closure of the university's medical school so that final year students could not take their qualifying examinations. In the event, all but two came to Britain to take the examinations with the cooperation of the British Medical Association.

This has caused enormous Government bitterness. Mr Mintoff has even accused the BMA of paying all the costs of the academic refugees, a charge which it has denied. Students protesting about the closure of the medical school have been roughly treated by police and at the university's graduation day ceremony in November a group of outsiders led by an official of the Labour Party, turned up on the campus and manhandled students and staff.



Mr Mintoff: centre of controversy.

Sweden

Agriculture campus is opened

from Mike Duckenfield

STOCKHOLM

Sweden's seventh university has been inaugurated by King Carl XVI Gustaf. Based in Ultuna, just outside Uppsala, the home of Scandinavia's oldest university—500 years old last year—the new University of Agricultural Sciences is an amalgamation of several specialist colleges motivated by the need for closer research collaboration.

With faculties in agronomy, forestry and veterinary medicine, the new university has 3,300 employees and 2,500 students and an annual first-year intake of 460.

Fifty departments, distributed nationwide, include a veterinary hospital, biomedical centre, ecological environment protection centre, genetic research laboratory and wildlife research centre. Unlike other universities, it will come under the Ministry of Agriculture.

India

Academics call for full political rights

from A. S. Abraham

BOMBAY

College and university academic staff have been campaigning in the capital, New Delhi, against federal government education policies.

One of their major demands is that academics should have full political rights.

Other demands include giving academics representation on national academic coordinating bodies like the University Grants Commission and the Central Advisory Board of Education.

After meetings with top government officials failed to answer the academics' grievances, Mr Amiya Das Gupta, secretary of the All-Indian Federation of University and College Teachers' Organizations, announced a national conference next month to frame an "action programme" to press its demands.

Don's diary

Sunday

Spend the so-called free time at the conference I am attending flicking through old copies of *The THES* in the common room. It is a publication I have only ever bought when unemployment has been pending and I have been looking for some university department to snap me up, so the associations the paper holds for me are not entirely pleasant.

It rapidly becomes clear that the picture of academic life painted in *The THES* bears no relation to life as I know it: in particular, the Don's Diary seems to chronicle experiences well removed from the humdrum existence of myself and (I believe) my colleagues.

For a good deal of the term, I have been looking forward to this conference, but as it draws to a close realize that it has been a waste of time, and worse, not even fun. Spend the plenary as I often have done in the past mentally toting up the travel claims of those present and thinking how the money could be better spent.

Stop the fantasy quickly when I realize that what I have in mind is not a socialist centre for the entire north of England or an improved meals on wheels but a new red 5 registration TR7 for myself. Try to alleviate boredom by beginning new fantasy. No dice. This conference has clearly done permanent damage to my brain. Hope it will recover in time for next week's work.

Monday

One of the nicest things about coming back to work after a few days away is the pile of mail which has accumulated. Who cares that most of it is boring? Nothing like your name on your door and a few letters in your pigeonhole to remind you that you're really real. Is this an existential crisis coming on?

See that I have a letter from a leading American woman academic and leave it till last on the well-known S. Cohen mail-opening principle described in this column some time ago. I was in the States talking about my work on women and health earlier in the year and, smirk, thinking that this will be the invitation to come again next year.

Hopes dashed when I find a cheque for $12 and a request to buy her an English hairbrush. Wonder idly if my male colleagues are approached to buy English razors or M & S underwear for their American colleagues and slope off for an early lunch.

Run into a colleague in the refectory who informs me that he is off to examine a thesis in Eire. The woman's movement magazine *Spare Rib* has recently been banned there, so suggest that he takes a careful over.

Slightly to my surprise (he has never seemed to me to be a very warm supporter of the women's movement) he agrees. Customs men have studiously ignored women taking copies of the banned magazine over the border.

I wonder whether he will be stopped, and realize that my request to him may have been ideologically unsound. What if this character should get caught and become a martyr to the women's movement? Decide that that would be just one of life's little ironies and go off to collect the magazines.

Perhaps I shouldn't be so ungrateful. Not only must I be one of the few university teachers lucky enough to have a woman and a feminist as a boss, but my male colleagues are willing to risk life and limb exporting contraband literature.

Tuesday

Into work early as I'm invigilating. The examination lasts four hours with a half hour coffee break in the middle, so pack sandwiches, pile of books, Thermos flask and the Guardian. Bed, of course, to check whether I'll be able to enter for the longest session of invigilation.

Just before leaving home, notice a bottle of posh perfume presumably left behind by someone visiting the flat while I was away at the conference. Splash a bit on and decide that it is jolly nice.

Our friendly department cleaner is still dusting when I arrive in the room to be used for the examination. Have by now forgotten about the perfume, but am reminded when she says: "Blimey, this place smells like a bad girl's bedroom. Can you smell that scent?" Obviously, this is going to be another bad day.

Some compensation a little later during the coffee break when one of the candidates tells me what a lovely perfume I'm wearing. Simper and make a mental note that that is worth at least an extra couple of marks if he's a borderline case. Leave at 2 pm with his paper and buy an English bristle hairbrush on the way home.



Wednesday

We must be the only sociologists in the country who work in a building with Le Rink emblazoned down one side and Mecca in lights across the front. The first four floors belong to the entertainment industry, the rest is leased to the university.

As Malcolm Bradbury has pointed out, a sociologist is always on duty. Maybe we should make the best of it and do a study of leisure in Bradford. As it is, our part of the building is closed in the evenings and for most of the weekend.

"What would happen if there was a fire miss?" asked a security officer on one occasion when I requested to stay on late in the building. Sometimes I think it would probably be a blessed release, and maybe we would get a decent social science building into the bargain.

Beef to colleagues about this over tea and am told by economist friend that since we have no study space readily available at work, we can claim a tax allowance for a study at home. Decide that this is the impetus I need to fill in my tax forms for the past four years and leave to do some interviewing for my research, planning what I will do with my enormous tax rebate.

Thursday

Wake up feeling ropey and wonder if I have a hangover. No, I spent last night drinking tea and filling in tax forms. Go off to meeting with colleagues to discuss a new course. Feel worse as meeting begins and wonder if I have time to run out and be sick without missing anything important.

Decide that I'm past caring on the next round. Head off, and spend the couple of coffee breaks point-blank refusing to be persuaded to change my mind to leave Bradford and come to Bristol to do the same sort of thing.

Half-heartedly make coffee appointment to see the Dean about a brief term in the spare for sabbatical. Be told that there's none available.

Some time later find myself on the ground floor attached and, dungarees and hard hat are unable to come and be trained in first aid. The ambulance, I am informed, is on its way.

In spite of doing well in medical sociology and having lived in the town for a year, I have no idea where the hospital is and the fact that of necessity as the ambulance hurtles along it is alleviated only by the fact that the crew doesn't seem to be sounding. The ambulancemen have clearly decided that it is not my heart. Good.

In casualty, find that a colleague also working on women and health is with me. Feel relieved; she'll see me alright. Examined by a doctor who looks about seventeen and whimper when he bends and stretches my legs, although uncertain whether this is through illness or the fact that I am so unathletic that having my legs pulled about would hurt at any time.

As he leaves pick up my notes and catch the words meningitis before a clerk picks them up, whips them away, tells me that they are confidential and proceeds to read them herself.

Student nurse arrives to put a label on my back and round my wrist. Miss or Mrs she asks, and looks at me with some contempt when I say Ms. I smile ingratiatingly. Some time later she reappears. This time she is the one to smile ingratiatingly. Dr Black is phoned to see how you are Dr Roberts, she says. I didn't know you were in the profession.

Wonder whether I can bluff it out, get moved to a side ward, have VIP treatment, but decide it won't wash. Admit to being a university teacher. Next time I see her, it is back to Miss Roberts.

Friday

Surprise myself by not only finding I am alive but also feeling quite well. Well enough in fact to telephone my mother for some sympathy. I am not allowed to sit up, but find that you can do more lying down than you might think.

The visiting hours seem to have no effect on my friends. Although most of them have working hours which are considerably more flexible than the average, they come in at any hour of the day which best suits them. Already institutionalized, this seems to me to be an act of great courage. "It's the status thing of course", explains my boss, adding accusingly: "You should know, you're a sociologist."

Saturday

Now that it has become clear to me that I am not a terminal case and that my brain does not seem significantly affected by whatever is wrong with me, decide that enough is enough and that it is time to go home. Who wants to squander the weekend in hospital?

Just before I sign the form absolving the hospital of responsibility, a colleague arrives with red wine in a Rihena bottle and white in a bottle of apple juice. Hesitate for a moment and wonder whether to stay in for a few more days with my feet up.

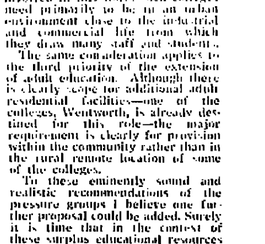
Have a speedy fantasy about missing my contribution to the Grundisse group next week with a good excuse, having a bit longer off teaching, maybe even a couple of weeks' convalescence somewhere nice....

The deprivation of hospital just isn't worth it. How much nicer to take on the sick role at home surrounded by one's own books, telephone by the bed. Set off down the road whistling and planning next week's teaching.

Helen Roberts

The author is lecturer in sociology at the University of Bradford.

Substantial asset comes on the market



Bryan Davies

Has the educational world fully woken up to the fact that a substantial number of pieces of choice property are on the market as a result of the cut-backs in teacher training?

If this property belonged to a central government department such as the Property Services Agency one could be sure that the most vigorous public debate would be taking place between various interested groups brimming with constructive ideas on how the needs of the community could be best served by their exploitation of these facilities.

Indeed, the national press would probably be monitoring the redeployment of these assets with a sharply critical eye. The departments and colleges of education due for closure over a four-year period are, of course, dispersed among a large number of local authorities and voluntary bodies.

This fact, however, should not obscure the reality of the situation which is that a substantial educational asset is "up for grabs" and there ought to be a close interest taken in the outcome.

In the final instance should any of the colleges be lost to education either the local authorities or the DES will reap some return from past investments, but educationists should be properly on their guard at the potential disadvantages in the conversion of educational property into a cash return, in this period of tight Treasury control.

In a recent answer to a parliamentary question that I tabled, the minister, Gordon Oakes, declared himself pleased "to see the high proportion of buildings which are expected to be used for other educational purposes". Of 20 sites whose future can be identified with some certainty only four are likely to be entirely lost to education.

In that typically elliptical fashion of such answers it is not clear whether the proposed purchase of Kesteven College by the National Union of Teachers for staff training and conference centre is regarded as retaining the college within education or not.

There remain a further eighteen colleges whose future is as yet undetermined as the body concerned finds it no easy matter to use.

Pressure is being applied in joint action by the National Union of Teachers, the National Association of Teachers in Further and Higher Education and the National Union of Students, buttressed by the support of the TUC which expressed its view that the colleges should be retained for educational purposes.

This powerful educational lobby has already made clear to the minister that it expects the colleges to make a significant contribution to three priority areas.

Firstly, they cite the need for facilities for increased induction and in-service training in all sectors of education already acknowledged on a government priority.

The difficulty, of course, is that the DES considers this kind of expansion encouraged in the Crown Paper to be well within the compass of the further and higher educational institutions committed to sustain teacher training following reorganization.

The second priority presents the DES with a far tougher case to answer. This is a proposal that the colleges should play their part in a total expansion of in-service and induction training for mature education lecturers particularly as new demands intensify in the sector as a result of conversion of colleges in the education and training of teachers for the under-fives.

This development is long overdue but, as the case both for small numbers of institutions already involved in this work such colleges need primarily to be in an urban environment close to the industrial and commercial life from which they draw many staff and students.

The same consideration applies to the third priority of the extension of adult education. Although there is clearly scope for additional adult residential facilities—one of the colleges, Wentworth, is already destined for this role—the major requirement is clearly for provision within the community rather than in the rural remote location of some of the colleges.

To these eminently sound and realistic recommendations of the pressure groups I believe one further proposal could be added. Surely it is time that in the context of these surplus educational resources we looked again at the case for boarding school provision for those in need.

In the nine years in which we have had Labour ministers of education since 1964 progress towards transforming boarding education in this country from being predominantly the preserve of the privileged can be said to have dealt with special needs have been negligible. Local authorities are, of course, under the 1976 Education Act prevented from creaming off a small number of the most able children by offering them scholarships to public schools.

While full integration of the public schools into the educational system seems as far away as ever, it is surely inexcusable that the need identified by the Public Schools Commission in 1969 for boarding education amongst a range of deserving social categories has received so little attention.

With local authorities so laggard in this respect, and with central government concentrating its attention almost solely on subsidizing the use of the existing public schools, the time is surely ripe for a stimulus from the centre to tackle this problem afresh.

Some of the redundant colleges of education could be adapted to this use at minimal cost. Their substantial residential accommodation, extensive sports facilities and even their geographical remoteness which are costly for conversion for other uses are ideal for boarding education.

The figures provided for the Public Schools Commission by Royston Lambert amply demonstrated the extent of the need. To meet the needs of children one or both of whose parents were deceased or children from broken homes or where relationships within the family were exceedingly poor and of children living in housing conditions and social situation were so bad as to jeopardize grievously their chances of coping with the demands of their local school, it was realistically suggested that the size of the boarding education sector had to be at least doubled.

Included in these figures were the increased numbers of children whose parents worked abroad or whose mobility within the United Kingdom was so great as to be disruptive to their children's education. Thus the capacity for creating schools with a wide social mix to the advantage of all concerned is clearly present.

To face one of the colleges is already scheduled for a rather special contribution in this area. With the location of the Toras energy research project at Oxford now decided, it is proposed to establish Culham College as a European school. It would be ironic if a Labour government succeeded only in creating an elite example of boarding education out of the demise of the colleges of education.

The initial departmental response to this proposition might well be negative. It will be argued that such priorities are the responsibility of the local authorities. Nevertheless, the DES might offer additional support to meet this long neglected area of need and in order to take advantage of this unique opportunity.

If the local authorities who own the colleges are those with least enthusiasm for this proposal what is to stop others making their bids? The DES will doubtless object on grounds of cost.

Can education, however, afford to lose substantial capital assets because of short-term cash constraints?

COURSES

European University Institute

Badia Fiesolana FLORENCE

(Established under Convention by the Nine Member States of the European Communities)

The European University Institute will shortly consider applications for research studentships for the academic year beginning September, 1978.

United Kingdom candidates should possess, or be expected to obtain, an honours degree of at least upper second class standard or its equivalent. They should also have adequate knowledge of one of the other official languages of the Institute (Danish, Dutch, French, German and Italian).

Normally, all candidates will be expected to pursue a course of study and research which either leads to the Ph.D. offered by the Institute itself or forms part of a course for a doctorate elsewhere. There are four departments :—

History and Civilization
Economics Law
Political and Social Sciences

The Institute is particularly concerned with the development of Europe, its history, its institutions, the relations between its constituent countries and its relations with other parts of the world. It will accordingly give special consideration to candidates who are already engaged in, or who wish to research in, those matters; it may reserve a limited number of places for students from countries which are not members of the European Communities.

Candidates from all parts of the United Kingdom may obtain application forms, and further information about the Institute and about student awards from: **The Department of Education and Science (HFE IV Branch), Elizabeth House (Room 7/1), York Road, London SE1 7PH.**

Student Awards will be related to the cost of living in Florence. Completed application forms are required to be posted to the Institute by 1 March, 1978.

The Dartington Society, Dartington Hall, Totnes, Devon

New Themes for Education Annual Conference 3rd-8th April 1978

'Images for the Future'
Chairman: Mark Brabant

A programme of workshops, lectures, discussions and presentations of innovative projects, concerning the educational requirements of the present in the light of our images for the future.

Among those taking part:

Michael Young, Director, the Institute for Community Studies; Amelia Peced, President, Club of Rome; Lawrence Stenhouse, Director, the Centre for Applied Research in Education; Henryk Skolimowski, Professor of Philosophy, University of Michigan; Friedl Cepra, Author of The Tao of Physics, Jan Cognitive Research Trust, Cambridge and Author of Lateral Thinking; James Robertson, Author of Power, Money and Sex; Ed Berman, Director of Inter Action Trust, London, Liz Greene, Psychotherapist and Author of Relating: Living Together on a Small Planet, and others.

Circumstances permitting

A limited number of bursaries will be available. For full information write to: The Secretary, The Dartington Society, The Elmhirst Centre, Dartington Hall, Totnes, Devon TQ9 6EJ.

Diploma in Management Studies (Education)

Applications are invited for the programme leading to the diploma in management studies (education) which will be offered on a day release basis over two years, commencing September, 1978. The course is based upon basic foundation studies which lead to a series of modules, each dealing with a major aspect of management in the education service. It is intended for those people holding a post of some management responsibility, with a career commitment in education management (in schools, colleges, polytechnics, universities, local government and educational service).

ARMC
NORTH EAST LONDON POLYTECHNIC
ESSEX COUNTY COUNCIL

Further details may be obtained from The Registrar, Ref. AO139 Anglian Regional Management Centre, Danbury Park, Chelmsford, Essex CM3 4AT. Tel. Danbury 2141.

This week in the
T.L.S.
Surrealism revisited
Mrs. Healey and
Miss Burdett Coutts
Kathleen Coburn and
Coleridge
The Times Literary Supplement
25p
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Wolsey Hall, the only correspondence college with full courses for London University External Degrees, provides individual instruction by highly qualified tutors.

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For a prospectus from the Principal
W M Al Milligan MBE, TD, MA,
Dept BAT, Wolsey Hall,
Oxford OX2 6PB.
Telephone (0865) 54231
(Answerfone after 4.45. p.m.)

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NOTICE BOARD



Keesingland Beach, one of the photographs in an exhibition, "A Sense of Place", by Ivan Robinson covering his work over 10 years on Northern, English, industrial and European landscapes, now being held at the Polytechnic of North London until January 27. Admission free.

Appointments

Universities

The Queen's, Belfast

Promotions to readers : Dr J. D. Allen (physiology) ; Dr D. R. Boyd (chemistry) ; Dr C. Meban (anatomy) ; Dr J. Welsh (computer science). Promotion to senior lecturers : Dr P. A. Gibbs (agricultural and food bacteriology) ; Dr R. W. Henry and Dr R. J. Farland (medicine) ; J. G. Kennedy (restorative dentistry) ; Dr S. D. McCartan (pure mathematics) ; Dr P. D. A. Owens (anatomy) ; Dr D. B. Prior (geography) ; Dr I. Turner (psychology). Lecturers : Trevor John Dadson (Spanish). Temporary lecturer : Christine Lesley Maureen Boyle (law). Assistant medical officer in the student health service : Jeannette Elizabeth Moureen Moore. Honorary treasurer : Sir William McKinney.

Chelsea College, London

Secretary of the college : Mr W. C. Slade.

UWIST, Wales

Promotion to reader : David Llewhelin Foulkes (law).

General

Mr A. Davlin, councillor, a member of Fife Regional Council, has been appointed a part-time member of Manpower Services Commission. He succeeds Dr J. P. Docherty.

Course news

"American Music in the Twentieth Century", an evening course of nine lectures which will cover jazz, blues, rock and concert music, will begin at the Polytechnic of Central London, Regent Street, on January 16 at 6 pm. Course tutors include : Irving Sablosky, former music critic and now cultural attache at the United States Embassy. Fee : £6 (students half price). Further details from Netta Swallow, Short Course Unit, PCL, 309 Regent Street, London, W1.

Open University programmes January 14 to 20

Sunday January 15

BBC 2
10.30 Countdown to the O.U.: Programme 24.
10.55 The pre-school child: Give and Take (1972: prog 11).

RADIO 4 (VHF)
9.30 Opening for A101 (Arts Foundation Course).
10.00 O.U. Announcements. Music till.
10.10 The first years of life: Mummies and Daddies: Husbands and Wives (1972: prog 11).

Thursday January 19

BBC 2
18.10 The first years of life: All Yours (1972: prog 2).
18.35 Countdown to the O.U.: Programme 2.

Friday January 20

RADIO 3 (VHF)
6.10 Arts foundation course: Tomorrow, and Tomorrow, and Tomorrow . . . (A101).
15.30 Dipping for Supplementary Maths.
15.00 O.U. Announcements. Music till.
10.10 The pre-school child: Naughty Things (1972: prog 21).

* Repeated programmes

Forthcoming events

"Technology as a Sociological Variable", "Telecommunication and International Relations", "Technology Transfer", and "Choice of Industrial Occupations" are among the topics dealt with in a series of lectures at City University beginning on January 16 at 5 pm. Further details from Dr A. Grieder, department of social science and humanities, City University, St John Street, London EC1V 4PB.

* * *

"The 18+ Research Programme : Studies based on the N and F Projects", a half-day conference organised by the Schools Council and the School of Education of the University of Reading, on January 21 in the Palmer Building of the university. No fee, but no more than five members from any one school. Applications to the Short Courses Office, University of Reading School of Education, London Road, Reading RG1 5AG.

* * *

"The English Civil War in Historical Perspective", the first Sophia Lecture, will be delivered by Dame Veronica Wedgwood, writer and historian, at the University of Newcastle upon Tyne on January 19 in Lecture Theatre 1 of the School of Physics. Admission free.

* * *

The first three Wolfson College Lectures on "The Origins of Civilization", will be held respectively on Tuesdays, January 24 and 31 at Wolfson College, Oxford at 5.30 pm. They are : "The Emergence of Man", by Professor Michael Day of St Thomas' Hospital, London ; "Primitive Man in Hunter, Fisherman and Farmer", by Professor Grahame Clark, Master of Peterhouse, Cambridge ; and "Early Towns in the Near East", by James Mellaart of the Institute of Archaeology, London University.

* * *

"Industry and the Economy" by Sir Monty Finniston, "Has Consumer Protection gone Far Enough ?" by Professor Gordon Borrie, director general, Office of Fair Trading, "The Condition of British Politics" by Professor Robert McKenzie, London School of Economics, are the first three Spring term lectures to be held respectively on January 17, 24, and 31 at the Polytechnic of North London, Ladbroke House, Highbury Grove, London N5. Tickets : 15p.

* * *

"Some Special Matrices of Rational Numbers" by Professor D. K. Harrison, and "Recent Results on Continuous Lattices and their Applications" by Professor K. H. Hoffman are the two topics of a meeting of the London Mathematical Society on January 20 at the Geological Society, Burlington House, Piccadilly. Enquiries to Dr D. Singmaster, Polytechnic of the South Bank, London SE1 0AA.

* * *

"The Distinctiveness of the DipHE", the third annual conference of the Association of Colleges Implementing DipHE will be held on February 10 at the Midland Hotel, New Street, Birmingham. Further details from Dr L. F. Moore, Faculty of Science Office, The Polytechnic, Wulfruna Street, Wolverhampton.

Chairs

Mr Alan Jennings, reader in civil engineering at the Queen's University of Belfast, has been promoted to the second chair in civil engineering.

Professor Edward M. McGirr, Muirhead professor of medicine in Glasgow University's department of medicine at the Royal Glasgow Infirmary, has been appointed administrative dean of the faculty of medicine and professor of administrative medicine.

Grants

Universities

Warwick

Economics — Dr J. I. Round, £11,000 from the SSRC for methods of projecting regional demands for labour using the Cambridge growth model.

Molecular Sciences — Dr G. H. Dodd, £13,514 from the SRC for olfactory receptor mechanisms ; Dr D. E. Griffiths, £17,305 from the SRC for role of E Coli oxidative phosphorylation and halobacterium halobium photophosphorylation ; £28,829 from the MRC for cofactor role of unsaturated fatty acids in oxidative phosphorylation ; inhibition by dietary trans-UFA and erucic acid ; Professor K. R. Jennings, £20,020 from the SRC for kinetic studies of gas phase ion molecule reactions. Dr T. J. Kemp, £30,300 from the SRC for ESR of radicals and triplets in photolytic systems ; Dr T. J. Kemp and Dr P. Moore, £14,650 from the SRC for kinetic and mechanistic studies with a stopped-flow and rapid scanning (optical) spectrometer.

Physics—Dr P. W. McMillan, £11,914 from the Ministry of Defence for optimisation of plasma ceramic microstructures and properties.

Psychology — Dr D. R. Rutter, £15,268 from the SSRC. for the development of turn-taking in mother-infant interaction : a longitudinal study.

Polytechnics

Leeds

School of Chemistry—Dr D. M. Brewis —£10,416 for research on mechanisms of the Corona treatment of Polypropylene and Ethylene-Propylene Copolymers ; Dr D. A. Armitage—£10,270 for research under the title fluid phase equilibria in binary and ternary systems.

School of Mechanical and Production Engineering—Dr K. J. Stout—£40,000 for research on surface topography — its relevance to production processes in tribology.

Awards

The Gibbs prize in law 1977 has been awarded to Alan Martin Kestall, exhibitioner, Exeter College, Oxford University.

Miss Lisbeth Hockey, director of the Nursing Research Unit at Edinburgh University, has been awarded a fellowship of The Royal College of Nursing in recognition of the contribution she has made to the advancement of the science and the art of nursing.

Noticeboard is compiled by Patricia Santinelli and Mila Goldie

General Vacancies continued

AMERICAN INSTITUTE FOR FOREIGN STUDY

SUMMER POSITIONS AS TUTOR-COURIERS ABROAD

AIFS, the educational travel organisers, is recruiting a number of tutor-couriers to accompany American high school students on study-travel programmes which are being organised for the coming summer period. Candidates should be graduates currently employed as tutor-lecturers at recognised United Kingdom educational establishments in the following disciplines : general studies, art history and fine arts, literature and humanities, history, and social studies.

Candidates should speak at least one foreign language well, preferably French. Experience with American students, or of accompanying students in travel abroad, will be an advantage.

Further information and application forms can be obtained by writing to :

JAMES GILLIS
AMERICAN INSTITUTE FOR FOREIGN STUDY
37 Queens Gate, London SW7 5HR
Telephone : 01-584 7302

Overseas

OVERSEAS TEACHING POSTS

INSPECTORS OF ENGLISH—PRIMARY
(CAMEROON)

Educational Delegations for the East and North Provinces—Bertoua and Garoua

Two members of a team concerned with the introduction of English in Francophone Primary Schools. To inspect classes, advise teachers and organise in-service courses.

Degree (preferably in English or Modern Languages), one-year University diploma in TEFL, relevant experience, preferably including teacher training, fluent French. Men only.

Salary : £4,589-£5,618 pa + 10% inducement.

Benefits : Personal and children's allowances: free accommodation

Two-year contract. 78 HE 5-6

ELT ADVISER
(CAMEROON)

South West Provincial Delegation for Education, Buea

To advise on English language teaching at Primary, Secondary and Teacher Training levels.

Degree, teaching qualification and MA in Applied Linguistics (or one-year university diploma in TEFL/TESL) ; at least four years' relevant experience, preferably overseas and in teacher training ; good French.

Salary : £4,589-£5,618 pa + 10% inducement.

Benefits : Personal and children's allowances ; free furnished accommodation. Two-year contract. 77 HE 9

HEAD OF SCIENCE
(GHANA)

St John Bosco's Training College, Navrongo

To lecture in General Science to 'A' level and supervise three tutors in the Science Department.

Science degree and at least three years' Secondary or Further Education teaching experience at 'A' level essential. Teaching qualification and/or teacher training experience desirable.

Salary : £4,589-£5,618 pa.

Benefits : Free accommodation ; overseas and children's allowances and other benefits. Four-year contract. Shorter period may be possible.

78 RT 1

TEACHING ADVISER
(BRAZIL)

Sociedade Brasileira de Cultura Inglesa, Rio de Janeiro

Teacher-training, administration of language laboratories, materials production, assisting with organisation of Cambridge EFL examinations.

Degree and/or Teaching Certificate. TEFL qualifications desirable. Some experience of teaching and organising language laboratories.

Salary : Cr$15,092.00 per month (£539 approximately).

Benefits : Annual bonus £750 ; outfit grant ; medical scheme ; two-year contract, renewable. 78 PO 1

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

THE BRITISH COUNCIL

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
UNIVERSITY OF MOSUL
COLLEGE OF ARTS
DEPARTMENT OF EUROPEAN LANGUAGES
(MOSUL-IRAQ)

LECTURESHIP IN ENGLISH

Applications are invited for a Lectureship in English. Applicants should be native speakers and possess at least one of the following degrees :

B.A. in English.
M.A. or Diploma in English or Teaching of English as a foreign language.

Salary : Basic salary on appointment will be in accordance with qualifications and experience within the range of £2500 to £7000 per annum, plus housing allowance and travel expenses.

The appointee is required for the academic year 1978/1979 beginning on September 1, 1978, and is normally subject to extension. For further details contact address above.

WEST GERMANY

WILHELM-LEUSCHNER-SCHULE
WILHELM-LEUSCHNER-STR. 1
6078 NEU-ISENBURG

Lehrbereich 12—Anglistik—
Deutsch 3, 4 (40 Stunden)

Applications are invited for the post of LEKTOR in the DEPARTMENT OF ENGLISH from September 1, 1978. The appointment is for two years. The successful candidate will be expected to teach mainly translation and essay writing classes.

Requirements : University degree in English or German. Diploma of Education or M.A. in applied linguistics. Teaching experience, good command of German.

Detailed applications naming two university referees should be submitted by January 31, 1978, to : Direktor, Lehrbereich 12—Anglistik—, Portugiesische 3, 4400 Münster.

Western Australia

ASSISTANT DIRECTOR-GENERAL OF EDUCATION
(TECHNICAL EDUCATION)

Following recommendations from the Western Australian Post-Secondary Education Commission the Government of Western Australia has decided to upgrade and expand the provision of Technical Education services in the State. These services are provided through the Technical Education Division of the State's Education Department. The direction and development of technical and further education will be the responsibility of a new officer to be appointed at the rank of Assistant Director-General.

SALARY : $A29,905 per annum.

DUTIES : Administer all matters relating to Western Australian technical education, including developing courses to meet emerging needs ; liaising with industry ; planning for the establishment of technical institutions ; budgetary and staffing controls. Consult with and advise the Minister, the Director-General of Education and various educational committees.

CONDITIONS OF SERVICE : Three months' long service leave after seven years' continuous service, four weeks' annual leave plus 13 Statutory Public Holidays, generous cumulative sick leave entitlements, superannuation benefits and other general conditions applicable to permanent public servants.

TRANSPORT AND REMOVAL ASSISTANCE : The cost of first class air fares incurred by the appointee, wife and dependent children under the age of sixteen years, plus a reasonable amount for removal of essential personal and household effects, subject to the appointee entering into an agreement to remain in the employ of the State for one to three years, according to assistance given. A single appointee will receive the cost of first class air fares. Some assistance toward the cost of removal of personal effects will be granted.

APPLICATIONS To state age, citizenship, qualifications and experience with the names of two referees to the :

Chairman
Public Service Board
111 St. George's Terrace
PERTH 6000, WESTERN AUSTRALIA

from whom further information is available on request.

Closing : January 27, 1978.

The British Council

Invite applications for the following posts :

Lecturer in English (Zaire)
English Language Units, Kinshasa
To run ESP and general English courses and assist with teacher training. Degree, Diploma in TEFL and minimum of two years' relevant teaching experience including teacher training and/or ESP; good French.
Salary : £4,939-£5,618 pa (10% inducement).
Benefits : personal and children's allowances ; free accommodation ; two-year contract. To HO 1
Lecturer in English (Congo)
Institut National des Recherches et d'Action Pedagogique, Brazzaville
Duties include preparation of broadcasts, advising on English teaching at INRAP, schools, etc., organising radio lectures and lecturing at a teacher training institute.
Qualifications : Degree in English or Modern Languages and one year postgraduate TEFL/TESL qualification. Experience in teaching English/French as a second or foreign language.
Salary : £4,939-£5,618 pa (including 10% inducement).
Benefits : Personal and children's allowances ; free furnished accommodation ; employer's portion of superannuation contribution. Two-year contract, renewable. 77 RL 17
Lecturers in Technical Subjects (Nigeria)
Heads of Department, Senior Lecturers and Lecturers in Civil Engineering and Building Environmental Studies ; Senior Lecturers, Lecturers in Mechanical and Production Engineering, Electrical and Electronics Engineering, Kaduna College of Arts, Science and Technology, Bende State, Nigeria. To set up, organise and teach courses in the recently established post-qualifying institute and to contribute to the existing undergraduate courses.
Qualifications : good degree or relevant qualification plus teaching experience.
Salaries : Head of Department—Naira 8868-9938 pa ; Senior Lecturer—Naira 7184-7742 pa ; Lecturer—Naira 5490 rising pa (£1=Naira 1.13 at present rate of exchange).
Benefits : 18-156 contract addition and 15% contract gratuity ; low rental housing ; car loan. Two-year contracts, renewable. 77 HO 156-161
Head of English Department/Teacher of Mathematics (Peru)
Colegio San Silvestre, Lima. Independent British girls' school of approximately 1,000 pupils. Teachers required for term beginning March, 1978.
Head of English, Senior School (11-17)—Qualified teacher preferably with Degree and TEFL qualification/experience to teach English throughout the Senior School up to Cambridge Advanced "O" level. Previous experience of departmental administration essential.
Salary : Baraham Scale 2.
Teacher of Mathematics : Senior School (11-17)—Qualified Mathematics teacher, preferably with a Degree, to teach Mathematics up to Cambridge Ordinary "O" level. Minimum of three years' experience. An interest in coordination with Junior Section of school (9-11) an advantage.
Salary : Baraham Scale 2.
Single candidates preferred.
Benefits : Overseas allowance ; terminal bonus ; employer's portion of superannuation ; three-year contract, renewable. 77 PS 101-101
Return fares are paid. Local contracts are guaranteed by the British Council.
Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

SWINBURNE COLLEGE OF TECHNOLOGY
(Melbourne, Australia)
LECTURER IN BIOPHYSICS
(Contract Appointment)

Applications are invited from graduates with a relevant higher degree in physiology, clinical biophysics or biomedical engineering and with clinical and/or research experience in cardiovascular physiology.

The above experience will also be considered in making the appointment.

The appointment will be by contract for three years' duration, including renewal and repatriation expenses. Permanent appointment during or at the expiration of the period, may be negotiated by mutual agreement.

The successful applicant will be involved in the undergraduate and postgraduate biophysics teaching programme with particular responsibility for the cardiac physiology component of these courses. The successful applicant will also be encouraged to participate in an area of relevant applied research.

Swinburne College of Technology is a tertiary educational institution affiliated with the Victoria Institute of Colleges. The Department of Physics is a member department of the Faculty of Applied Science, and has academic responsibility for undergraduate courses in biophysics and instrumental science together with postgraduate programmes in biophysics, biomedical instrumentation and instrumental science.

Salary : Lecturer H $A16,691-$A16,248 ; Lecturer I $A17,745-$A19,201 p.a.

Applications close 18 February, 1978.

Further information about the position, conditions of employment and application procedure may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

ADELAIDE COLLEGE OF ADVANCED EDUCATION

The College is situated in the city centre of Adelaide and offers courses providing academic and professional training for teachers in secondary schools in arts, science, economics, commercial studies, drama, physical education and school librarianship. Programmes are offered to full-time, part-time and external (correspondence) students. It proposes the College awards a Bachelor of Education degree, and undergraduate diplomas in teaching and various diplomas at the graduate level. Additional courses at the graduate level are planned for 1978.

Applications are invited for the following contract post. The period of the initial contract is negotiable up to three years. Renewal of the contract or a tenured position may be possible. It is hoped that the successful applicant can take up the appointment by May, 1978.

LECTURER GRADE II/III
IN READING EDUCATION

The successful applicant will be required to assist in the developing and teaching of units in the Graduate Diploma in Reading Education and of undergraduate units in language and reading.

Qualifications should include recent graduate work in language and reading development. Successful teaching at either primary or secondary level is also required. Experience in team teaching, school-based in-service work in reading, teaching in open-space or vertically grouped classes, and teaching children from a variety of cultural backgrounds will be an advantage.

Preference will be given to an applicant who is prepared to hold teachers' College methods and materials appropriate to their classes.

APPLICATIONS AND CONDITIONS OF APPOINTMENT : Applicants should give particulars of age, present position, salary, academic and professional qualifications, teaching experience and any other information bearing on their ability to carry out the duties of the post. They should also indicate their readiness and background for liaison with cooperating primary and secondary schools, and supervision of school experience of students at undergraduate level. The names and addresses of three referees are required.

Salary scales are at present : Lecturer, Grade II : $A14,032 to $A16,748. Lecturer Grade III : $A12,593 to $A14,448.

Further information may be obtained from the Academic Secretary of the College, 46 Kintore Avenue, Adelaide, S.A. 5000, or from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications close on 16 February, 1978.

HONGKONG POLYTECHNIC

The Hong Kong Polytechnic is an expanding institution which is now putting into effect a forward-looking development plan incorporating a credit unitary approach combined with a self-learning system. The basic teaching departments are organised into three Divisions—Engineering, Applied Science and Commerce & Design, with broad, interdisciplinary centres and institutes relevant to the needs of Hong Kong.

Applications are invited for the following posts which are tenable from 1 September, 1978, except where otherwise indicated:

ACCOUNTANCY

Principal Lecturers and Lecturers in Accountancy.
Senior Lecturers in Financial and/or Management Accountancy.
Knowledge of computers in accountancy is an advantage.

APPLIED SCIENCE

Principal Lecturers/Senior Lecturers/Lecturers in Applied Science. To teach Materials Technology, Packaging Science, Instrumentation or Optics.
Senior Lecturers/Lecturers in Applied Biology. Mainly to teach Human Biology.

BUSINESS AND MANAGEMENT STUDIES

Principal Lecturers in Law to coordinate teaching of law within the Department and service courses for other Divisions; to teach law in at least two of the following areas: Law related to Land Administration, Local Government Law, Contract Law and Arbitration, Industrial Law, Company Law and Law of Property.
Principal Lecturers in Marketing to teach International Marketing and one other specialist area.
Principal Lecturers in Management Studies to teach one or more of the following: Organization Theory, Behavioural Science, Personnel Administration.
Senior Lecturers in Economics, Banking Studies, Insurance, Marketing, Marketing Research, Supervisory Management.
Practical experience in the field, which could be applied research or consultancy, as well as teaching experience is essential for senior posts.

BUILDING AND SURVEYING

Principal Lecturers/Senior Lecturers/Lecturers in Building Technology and allied subjects or Senior Lecturers/Lecturers in Building Management/Technology.
Senior Lecturers/Lecturers in Building Services.
Senior Lecturers/Lecturers in Land Surveying.
Lecturers in Quantity Surveying.
Lecturers in Valuations/Urban/Land Economics.
Corporate membership of the RICS, IOB, IQS and the CIBS are regarded as degree equivalent qualifications in the appropriate disciplines.

CIVIL AND STRUCTURAL ENGINEERING

Principal Lecturers/Senior Lecturers/Lecturers in civil engineering subjects (some posts tenable immediately).

COMPUTING SCIENCE

Principal Lecturers/Senior Lecturers in Computing Science.
Preference will be given to applicants with interest in one or more of the following areas: Accountancy, Business Studies, Engineering, Mathematics, Nautical Studies, Design, etc. and to applicants with interest and experience in the training of commercial computer personnel.

DESIGN

Senior Lecturers/Lecturers in Advertising Design, Product Design, Far Eastern Art, Drawing and Illustration, General Design Practice and Photography.

ELECTRICAL ENGINEERING

Senior Lecturers/Lecturers in Electrical Generation/Transmission/Distribution, Magnetic Field Theory and High Voltage Technology (some posts tenable immediately).

ELECTRONIC ENGINEERING

Principal Lecturers/Senior Lecturers/Lecturers in Integrated Circuit Applications and Fabrication, System and Control Engineering, Electronic Instrumentation, Measurements and Calibration, Digital Computer Architecture.

INDUSTRIAL CENTRE

Posts equivalent to Principal Lecturer/Senior Lecturer/Lecturer level to provide industrial training in Design/Drawing Office, Basic Machine Shops, Tool and Die Making, Electrical and Electronic Practice, Maintenance Section, Foundry and Forge, Projects Unit and Production Unit.
Industrial experience is essential and training experience for Higher Technician/Technologists would be an advantage.

LANGUAGES

Senior Lecturers/Lecturers to teach English as a second language to technical and commercial students.
Experience and a specialist qualification in teaching English as a second language are required. Experience and qualifications in the teaching of French or German would be useful.

MATHEMATICAL STUDIES

Principal Lecturers in Mathematics.
Lecturers in Engineering Mathematics or Business Statistics.

MECHANICAL AND MARINE ENGINEERING

Principal Lecturers/Senior Lecturers/Lecturers in Marine Engineering, Strength of Materials, Thermodynamics, Fluid Mechanics, Theory of Machines, Engineering Design, Control Engineering, Environmental Engineering.

NAUTICAL STUDIES

Senior Lecturers in Marine Electronics to teach Electronic Navigational Aids or Marine Radio Communication or Marine Electronic Automation.
Lecturers in Nautical Studies.

PRODUCTION & INDUSTRIAL ENGINEERING

Senior Lecturers/Lecturers to teach at least two of the following subjects: Manufacturing Technology, Press Tool Technology and Plastic Moulding Technology.

MEDICAL AND HEALTH CARE

Principal Lecturers/Senior Lecturers/Lecturers in Medical Laboratory Sciences.
Senior Lecturers/Lecturers in Ophthalmic Optics; Radiography; Physiotherapy; Occupational Therapy.

TEXTILES AND CLOTHING

Principal Lecturers/Senior Lecturers in Fashion and Textile Design.
Applicants must have experience in both fashion and textile design.
Principal Lecturers/Senior Lecturers/Lecturers in Clothing Technology.
Senior Lecturers/Lecturers in Fashion Design; Clothing Production; Colour Physics; Dyeing.

SOCIAL WORK

Principal Lecturers/Senior Lecturers/Lecturers in the following specialisms: Family and Child Care; Group and Community Work; Social Work Practice; Rehabilitation and Field Teaching.
At Principal Lecturer level experience in curriculum development and evaluation preferred.
Senior Lecturers/Lecturers in Psychology, preferably Clinical Psychology.
Lecturers/Assistant Lecturers in Sociology.
Candidates should be able to teach and supervise research and be familiar with computer applications in social research.
It will be an important asset for all posts in the School of Social Work if candidates are familiar with the Hong Kong scene in their specialisms preferably through actual field experience. Fluency in Chinese and spoken Cantonese will be an advantage for all posts and is essential for some.

EDUCATION TECHNOLOGY

The Polytechnic wishes to appoint *Associated Staff Members* who, although appointed to a specific academic department, would spend half of their time working in the Education Technology Unit. Applicants who wish to be considered for these positions should mark their application form "Joint Appointment" and give relevant detailed support to both their academic background and education technology experience.

GENERAL QUALIFICATIONS

The Polytechnic places emphasis on the utilization of Education Technology in its credit unit course structure. Experience in this field will be an advantage to those applying for any teaching position. Applicants who can demonstrate an interest in applied research and development will also be given preference.

Principal Lecturer
(a) a degree or professional qualification *and*
(b) an advanced specialist qualification or extensive experience in a specialized field *and*
(c) substantial teaching *and* industrial/commercial experience *and*
(d) proven administrative ability.

Senior Lecturer
(a) a degree or professional qualification, plus preferably an advanced specialist qualification *and*
(b) at least five years' professional experience *and*
(c) substantial teaching and/or industrial/commercial experience about three additional years) *and*
(d) proven administrative ability.

Lecturer
(a) a degree or professional qualification or at least a Higher Technician qualification in the appropriate field of study *and*
(b) at least five years' professional or industrial/commercial experience or at least three years' teaching experience or a suitable combination of professional and teaching experience.

Assistant Lecturer (mainly a training grade)
(a) a degree or equivalent professional qualification or
(b) A Higher Technician qualification in the appropriate field and one year relevant experience.

SALARY SCALES

Principal Lecturer	HK$91,740	× 5	to $113,340	pa.
Senior Lecturer	HK$74,460	× 6	to $100,380	pa.
Lecturer	HK$40,920	× 11	to $73,980	pa.
Assistant Lecturer	HK$29,880	× 6	to $40,680	pa.

or, at HK$8.67=£1, sterling equivalent is £10,581 to £13,073; £8,588 to £11,578; £4,720 to £8,533; and £3,446 to £4,692 respectively.
Entry point depends on qualifications and experience.

CONDITIONS OF SERVICE

Appointment will be on two-year gratuity-bearing contract terms initially. Thereafter suitable appointees may be offered further contracts or superannuable terms of service at the discretion of the Polytechnic. Benefits include passages, long leave, subsidized accommodation, medical and dental treatment, education allowances and a terminal gratuity equal to 25% of basic salary received over entire contract period.

Further information and application form which should be returned by February 11, 1978, obtainable from the Recruitment Unit, TETOC (Technical Education and Training Organization for Overseas Countries), 35/37 Grosvenor Gardens, London SW1W 0BS.

When applying please state clearly the post and the level in which you are interested and quote HKP/THES.

Tetoc

PRAHRAN COLLEGE OF ADVANCED EDUCATION

Melbourne, Australia

Prahran College of Advanced Education is a publicly supported tertiary institution offering to 4,500 students a broad range of certificate, diploma, degree and postgraduate courses in Fine Art and Design, Business and General Studies. It is located in a cosmopolitan inner suburb of Melbourne, a city of three million persons. PCAE has special commitments to part-time and mature-age students and to informal adult education. The College is presently seeking to fill the following positions:

DEAN, SCHOOL OF GENERAL STUDIES

Duties: Overall responsibility to the Director of the College for the further development of a new School presently consisting of 25 staff and 275 students enrolled in a multi-disciplinary Diploma of Arts in the social sciences, literature, professional and creative writing, Jewish Studies, languages (Modern Greek, Chinese, Indonesian), and community work. A BA degree and graduate diplomas in child care administration and adult education are under development.
Qualifications: A higher degree, substantial experience in teaching/scholarship/research, curriculum development and university or college administration, and a strong commitment to community education.

HEAD OF DEPARTMENT, ADMINISTRATIVE STUDIES

Duties: Responsible to the Dean of Business for the administration of the Department, which teaches personnel and industrial relations and services administration courses in other programmes.
Qualifications: A higher degree; membership of a relevant professional association, and extensive academic, professional or business experience at a senior level.

PRINCIPAL LECTURER, ART AND DESIGN

Duties: To co-ordinate the development of and be responsible to the Dean of Art and Design for a multi-disciplinary degree programme in art and design (drawing, painting, sculpture, ceramics, printmaking, photography, ID and graphics) and to teach Art History.
Qualifications: MA or MFA, five years full-time tertiary teaching experience, demonstrated record as practising artist. Experience in curriculum development desirable.

LECTURER/SENIOR LECTURER, MUSEUM STUDIES

Duties: To co-ordinate the development of and be responsible to the Dean of Art and Design for a new postgraduate diploma course for museum and gallery personnel.
Qualifications: MA or MFA preferred, significant full-time tertiary teaching and gallery/museum experience.
Salary: Dean £17,714; Head of Department £14,837-£15,443; Senior Lecturer £12,157-£14,183; Lecturer £7,780-£11,001.
Applications for all positions close on 14 February, 1978. Inquiries and applications, including the names and addresses of three referees, should be addressed to the Registrar, Prahran College of Advanced Education, 142 High Street, Prahran, Victoria 3181, Australia. Overseas applicants should send an additional copy of their application to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom further information may also be obtained.

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

HEAD OF ELECTRONIC ENGINEERING

Applications are invited for appointment to the position of Head of Electronic Engineering. The position will become vacant in February, 1978 upon the retirement of the present Head, Mr. D. W. Cox. The School of Electronic Engineering, which occupied a new building at the Institute's Levels Campus in May, 1977, is responsible for providing Bachelors degree and Associate Diploma level courses, and for the presentation of service subjects in other courses. It is planned to introduce a Masters degree programme by Research in 1978.

DUTIES:

The successful applicant will have specific responsibility for providing academic leadership in the development and presentation of courses in Electronic Engineering and for the promotion of industrial and commercial liaison.

The Schools of Electronic and Electrical Engineering are presently constituted as separate Schools. Consideration is being given to their combination into a single academic unit when either the Head of Electronic Engineering or the Head of Electrical Engineering would be appointed as administrator (or chairman) of the combined School.

QUALIFICATIONS:

Applicants should possess appropriate academic qualifications and have had considerable professional experience as an electronic engineer.

The successful applicant will be eligible to apply for the conferment of the title Professor or Associate Professor which will be judged upon capacity for academic leadership—including teaching, course development and applied research.

ANNUAL SALARY (Australian)

At one of the following levels, according to qualifications and experience.

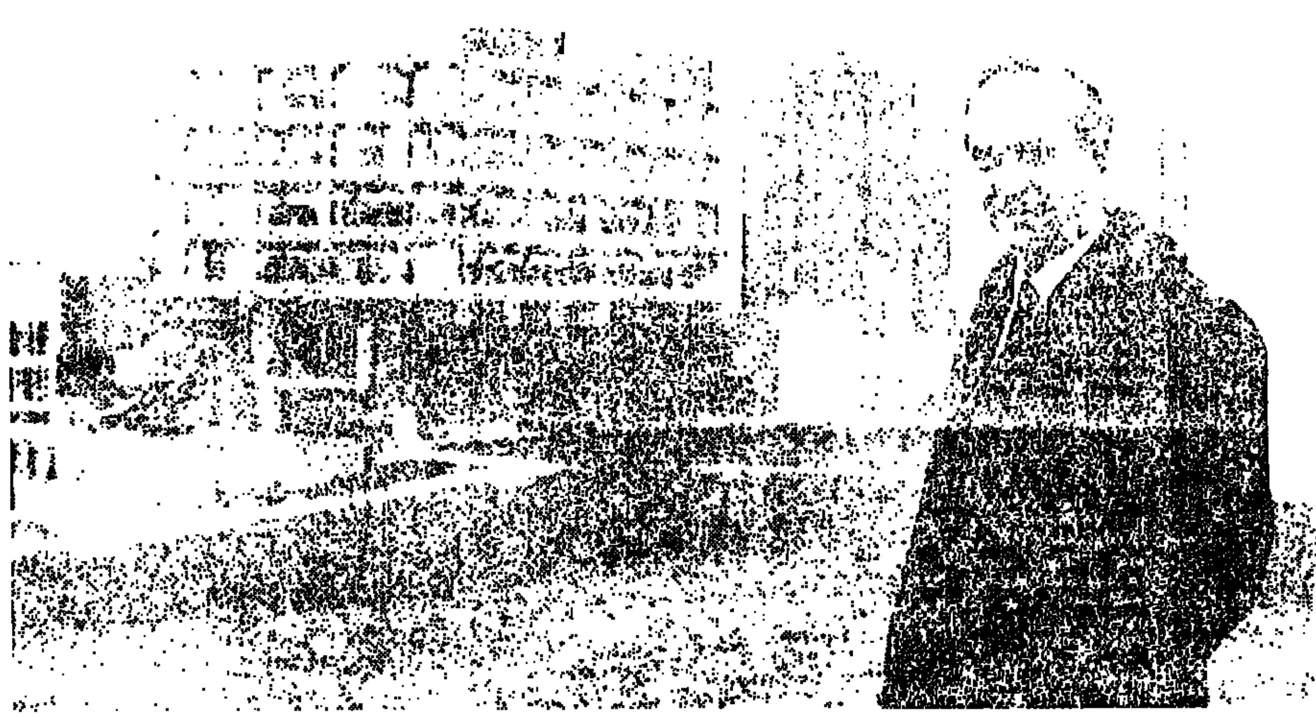
Level 3	$25,975	Level 5	$29,728
Level 4	$28,669	Level 6	$30,786

Application forms, conditions of service, and further information may be obtained from the Chief Personnel Officer, South Australian Institute of Technology, North Terrace, Adelaide, South Australia 5000, to whom applications including the names and addresses of three referees should be forwarded by the 28th February, 1978.

FURTHER VACANCIES APPEAR ON PAGES 25 to 31

From optimism to uncertainty

In our occasional series on men who shaped the 1960s Frances Gibb talks to Dr Albert Sloman vice-chancellor of Essex University



The man and his university—Dr Sloman on the Essex campus.

Like the other universities of the 1960s Essex was born on a wave of optimism. It fostered hopes and ideals, ambitious plans and excitement. In 1963, before it opened, Dr Albert Sloman, the vice-chancellor to be, said: "Never has the need for change been so great, and never has there been such opportunity for change. The University of Essex, along with the other new universities, enjoys exceptionally favourable conditions of development."

It was assured, he said, of money, students, staff and the freedom and scope to "do something fresh and bold and distinctive". His views, delivered as the Reith Lectures that year on "a university in the making", concentrated on the nuts and bolts of a new university; the how rather than the why.

The reason for talking so little about function and so much on the methods for discharging that function was simply that "the fundamental aims of a university are not in dispute, nor, I believe, is the response of British universities today in the face of the social and economic needs of the country".

Now, 15 years later, the biggest change according to Dr Sloman is that this consensus has gone. "Before, there was a sense of direction in British universities; a motivation which you do not get now. In the early 1960s, there were assumptions we never questioned. Now we are questioning them and, for me at least, moving from a period of confidence to one of uncertainty."

The assumptions of the 1960s have been challenged on four fronts, he says. First, the Robbins' principle, enshrined in his 1963 report, that higher education should be available to all both qualified and desirous of it, and with it the whole question of educational opportunity. He sees the reason for this change as a fundamental shift in government policy. "Instead of assessing how many want higher education and saying this is what it would cost, one has the feeling the Government says we've spent so much, now let's add 5 or 10 per cent to that. If this is true, it is a total reversal of policy.'

As in the 1960s, there was still the problem of untapped resources, and the small proportion of students from lower income groups, but no-one was talking about it. What was formerly gospel, that if people had ability you provided for them, was now questioned.

The numbers question is pertinent to places like Essex, founded in an era of growth, planned eventually for 10,000 students and reaching 3,000 in the first 10 years. Dr Sloman launched his lectures on this very issue of size "as though bigness were important", he said. Then added: "I believe it is vitally important."

This was because of the huge expansion in student numbers expected at the time and also because English universities had traditionally been small. Essex's size meant a departure from this tradition, a departure necessary to meet expected growth in both numbers and knowledge.

Current intake is on target, Dr Sloman says, but demand for places could be created or stultified by a number of devices of social engineering such as the provision of more or less generous student grants. "The university's original target still stands if the Robbins' principle still stands", he says. "But does it?"

The second major assumption being questioned was that the higher education system was made up of a variety of institutions within which universities had a clear and distinctive role with their unique combination of teaching and research.

Internationally, and to some extent here, he sees a move towards the comprehensive institution of higher education. "People seem to be afraid of selection and to have misgivings about choosing students for particular institutions. But in countries with a range of political systems—the United States, Japan, France and the Soviet Union—universities are very selective.

Dr Sloman is unhappy about this tendency to distinguish between people and between higher education institutions. He argues universities have a unique role in teaching and research which, if they are to remain internationally competitive, they must keep. "You cannot expect Britain to have 60-90 first-rate departments of physics and so there must be some institutions, which we happen to call universities, which have the specific role of the pursuit of excellence."

Fifteen years ago, no one questioned this role. Even Essex's innovations, Dr Sloman stated, were departures from form and method, not from principle. "Far from repudiating the accepted idea of a university, we are determined to preserve and perpetuate it." This accepted idea, he said later, was that conceived in the Middle Ages, of a self-governing community, concerned with advancing, preserving and disseminating knowledge.

But now, he says, there are numerous speeches made implying the irrelevance of universities' teaching and research. "Three years ago, the vice-chancellor of Cambridge felt obliged to produce a document on the usefulness of research in Cambridge. Twenty years ago, no one would have thought such a document necessary."

The third assumption was that there would be money. It was accepted, Dr Sloman says, that what the University Grants Committee identified as the reasonable financial needs of the universities would be met. "Now we do not have confident statements from the Prime Minister saying that principle is honoured and that the resources are there."

The Public Accounts Committee's assumption that universities' finances have not fallen below the 1971-72 levels was seen by many as more than just lack of sympathy, he says. There was also the loss of the long-term planning horizon; in the early days, the quinquennial system of financing was still a reality.

The argument that there was an economic crisis could equally well be deployed in the universities' favour. "One could say that in such times, the need for trained people is greater than before, and that at least one is giving young people three more years before unemployment."

Lack of money has meant, inevitably, less freedom—the fourth change since the early days. British universities, Dr Sloman believes, still enjoy a remarkable degree of freedom about which students to take, their curriculum, teaching, assessment and research, and above all, in how to deploy their grants.

"But we had another freedom, which has now gone; the freedom to say what kind of institutions they were going to be; what size and what subjects they would offer." These decisions now rested with the UGC. He adds, however, that with the increased number of institutions such freedom would be impossible and it was necessary for the UGC to have an overall view of provision.

Despite all these changes Dr Sloman has few regrets about the way things were done. One popular criticism of universities today is that their courses are irrelevant to society's needs, a criticism Essex might be particularly open to with its large sociology department. But Dr Sloman argues first, that universities are not the ivory towers the public imagines; they do have links with the local communities and with industry.

And anyway, it was impossible to predict society's needs. A university education should be a general training at the end of which students should be flexible and adaptable, he says. He believes also in free market forces: students had antennae sensitive to the job market, and would choose their subjects accordingly.

One disappointment he will admit to is language study. As a Hispanist he had hoped Essex would develop a strong language centre but all the early predictions about Russian and other languages being boom subjects turned out to be wrong.

In general, though, his beliefs of the 1960s still hold. It is not these that have changed so much as the political climate and public opinion. Even with regard to student activists he says it is not so much unrest that is new as the methods employed. In the early 1960s it was not thought legitimate to use direct action to put views across.

He maintains also that the possibilities of the 1960s still remain, but they depend on money and students being available. On this he stays optimistic, however. "The lack of funds is not, in my view, permanent or irreversible, but we have got to live through it. There is a tremendous responsibility to get across to the public that we do believe in higher education, and that there is a distinct role for universities which should have adequate financing."

Judith Judd on the Schools Council's latest view of a new examination system

Now, can N + F be equal to A?

The year 1978 should bring new life to the debate about changes in Britain's schools examination structure. Controversy about the Schools Council's proposals to replace the present A levels by a five-subject two tier examination called N (Normal) and F (Further) levels has smouldered quietly through 1977.

Now the council is gathering the results of its investigations together. This summer should see the publication of an overall report looking at the feasibility studies which have been completed. The first shot has been fired with the publication this week of a report which looks at the cost of implementing the proposals in schools and further education colleges.

The report "Examinations at 18-plus: Resource Implications of an N and F Curriculum and Examination Structure" will offer little comfort to anyone hoping that the new examinations might prove too expensive to operate. Whatever the educational merits of the proposals they do not require big increases in manpower.

The survey was carried out in two stages. In the first, 189 schools and colleges were asked about the nature of provision and the variety of opportunities which exist under the present system. In the second, 19 schools of various size and type and five colleges of further education were asked to simulate the setting up of the organisation they would require for a curriculum based on N and F levels.

The report makes clear that under the proposed system the average number of examined subjects increases in all schools. "A high proportion of those now studying two or three A levels (or more) would study five subjects at N or F level." Many of those not studying A levels now would also not take any N or F levels, but some would. The fact that some students who stay on for one year at present have chosen N or F level subjects suggested that some of them would stay for a second year if satisfactory courses were provided.

The increase in the numbers taking N compared with those taking A level is spread across all subjects though it is not the same in all. The survey shows that the percentage of all entries in the 10 most popular subjects tends to be lower if students intend to take N and F level than if they are taking A level. This may indicate that students are widening their range of choices.

There are, of course, differences between schools, but the A level "league-leaders" tend to be caught up by others. Though English and mathematics still top the table, geography, history and economics are catching up.

In mathematics, especially, the N and F level proposals appear to promise well. One school in the survey offered a use of mathematics course tailored to the needs of N-level students which recruited well. "This is perhaps an indication that if mathematics syllabuses were available, aimed at students for whom present A-levels are unsuitable, recruitment might be higher."

Even better, the new recruitment to maths is higher among girls than among boys, and all three science subjects recruited better, with biology overtaking physics and chemistry.

Languages, too, benefit under the proposed new system, with French maintaining its lead but with the second modern language, usually German, though sometimes Spanish, securing considerably more students. Sociology and politics, though not offered in all schools, grow more than the average.

The report suggests there is a demand in a five-subject curriculum for some study in social science "which might require the consideration of some sort of integrated or multidisciplinary syllabus". The growth in religious education means that some schools can now make provision which was not possible before.

The report raises a number of questions in this area. How many subjects should be offered by schools at N and F level? What subjects other than the most popular should be offered to provide a balanced curriculum? Is there a need for integrated science or social science or a multidisciplinary creative subject?

Can the schools cope with the increasing numbers and the wide variety of subject combinations? The report concludes: "The Joint Examinations Sub-committee is satisfied that in all cases the schools could devise an educationally satisfactory sixth-form organization within existing teaching resources."

The report has detailed evidence to back up its case. It says that one of the main differences between the teaching resources needed for N and F levels and A levels is the length of time students are taught. This means that the increase in numbers of students in a subject brought about by the introduction of N and F level would not always result in a need for more teachers.

The simulation exercise required schools to reconsider examination courses other than those leading to A level. Some drew up plans which would have needed more teaching resources and other schemes which needed no more. In five schools there would have been a big increase in the number of teaching periods, in two others a smaller increase. In seven there would have been a saving of periods and in the other five no change. A similar pattern emerged for the resources needed for work which was not to be examined.

"It is probably true to say that in schools which have increased their use of resources, opportunities have been taken which were not entirely necessary in implementing a five-subject curriculum."

The picture which the report presents of the effect the proposals would have on teaching space is also encouraging. At 11 of the schools a five-subject curriculum would use more teaching space for the sixth form, five would require less and three the same number. The schools which would use more space, however, felt that they could operate the system in their existing buildings by careful organization.

The report reaches some general conclusions about the effect of N and F levels on students and the curriculum. These bear out the contention of those who argue that the N and F levels would do much to break the tradition of concentration upon very few subjects.

"The evidence from the choices of subject made by students is that they have, in the majority of cases, added subjects which have increased the variety of fields of study in which they would be involved." Whereas at A level about 80 per cent of students in the survey take subjects in two or less subject areas, at N and F levels about 80 per cent of them would study subjects in at least three of the five areas into which the survey classified subjects.

Schools Council Examinations Bulletin 38 Examinations at 18 plus: Resource Implications of an N and F Curriculum and Examination Structure, published by Evans/Methuen, price £5.55.

A retired academic shapes the future of English football

From Oxford to Wembley

Sir Harold Thompson must be one of the most controversial retired dons in Britain. After a distinguished career as professor of chemistry at Oxford University, he has been chairman of the British Football Association for the past two years.

In that capacity he has pledged to put British soccer—in the widest possible sense—back on what he considers to be the right path, and is therefore subject to a wide range of criticism (and sometimes abuse) from the millions of people who are quite sure they could do it much better.

The morning that I interviewed him, for example, he had just received a letter from a man in prison attacking the recent appointment of Ron Greenwood as England manager. "You just have to take all the criticism", he says, adding "I do try to answer nearly all the people who write."

The criticisms are wide ranging. "I have been attacked for calling Greenwood a 'jolly decent fellow'," he recalls. "I'm called an academic genius, which is a lie; a lefty intellectual, which is a lie, and an angry professor. Well, I suppose I am angry sometimes, though I don't know whether being called a professor is an insult or not. . . ."

He says that football is all about having fun, and this is a word which occurs frequently in his conversation. He uses it to describe his academic work: "I got an enormous amount of fun out of science, from finding out new knowledge, new information, testing new theories. I enjoyed it very much, and particularly the personal relations that have come from it."

It is fairly obvious when he opens his mouth that he was born a Yorkshireman. "I have the brogue", he says, "and I hope that I have a certain toughness, what I regard as the good Yorkshire qualities. I may be frank, but I hope I'm straight and I hope I'm fair."

But, thinking back to his childhood as son of a colliery general manager near Sheffield, he says: "Even Yorkshire has changed. When I was a child it used to be much more fun. We used to play cricket and football on the slag heaps with the locals. There was something wonderful then, a real community."

After his childhood, he went to King Edward VII school at Sheffield, then on to Oxford, where he became a student of the late Sir Cyril Hinshelwood, whom he considers to be one of his greatest influences.

After his degree he spent a year at Berlin University, where he lodged at the home of Max Planck and was intoxicated by the brilliance of the place. He returned to St John's College as fellow, later



Sir Harold Thompson

becoming reader, professor and now emeritus professor. He still tries to keep up with his scientific work, though he says he is rapidly becoming out of date, and is writing a book on international scientific relations.

The long list of honours he has acquired testifies to his success. Honorary doctorates from Cambridge, Newcastle and Strasbourg. For 16 years foreign secretary of the Royal Society. Member of many government and international bodies, from the Great Britain-China committee to the International Union of Pure and Applied Chemistry of which he is a past president. Knight Bachelor, Commander of the British Empire, Chevalier of the Legion of Honour, holder of the grand service cross of the Federal Republic of Germany and the order of the Aztec Eagle from Mexico. Honorary member of the scientific academies of Spain and Ecuador, and about to become an honorary member of the Chemical Society of Japan.

But during all these achievements he has maintained his interest in football. "I think as a game it demands a contribution of mental and physical effort and skill more than any other game", he says.

He played for Oxford University in 1928 and 1929 (he was a centre half) and for other amateur clubs, including Oxford City. He was elected to the FA council in 1941. In 1946, when he became a fellow of the Royal Society, his wife suggested that he should start to take things a little easier, and he set up a football club — Pegasus F.C. — which twice won the Amateur Cup in the 1970s.

"One very interesting thing — though I don't know the meaning of it—is that when I look back at my scientific papers this was the time when—even though I was devoting so much time to Pegasus—I produced my best stuff scientifically. Looking back the volume staggers me."

He retired from his Oxford chair several years ago, and shortly after moved up from being vice-chairman to chairman of the Football Association. "When I became chairman I made it pretty clear that I thought we were losing the fun and enjoyment from the game. We are now trying to get that back.

"I wasn't very keen on the job at first. I really felt some changes ought to be made in the way we run things . . . I think we're beginning to make some of these changes, though it's a pretty hard job and you can't do this kind of thing overnight." He also foresees an improvement in the performance of English football teams. "We've been playing this defensive stuff for too long. We won the World Cup by inventing a new defensive system. . . . But it's got to change and this is beginning to get through.

"What kind of changes? If I used the word moral I think it would be misinterpreted. But we need a new spirit in our affairs. This needs plenty of hard work; we will have to be bold and make some experiments.

"There is among some people a quite considerable lust for money—and money is the root of all evil. There's a lack of discipline. Hooliganism is a national disease. And there's the danger of too much commercialism. Players are sometimes silly boys and give themselves a bad time by their misconduct.

He refers to his appointment of Ron Greenwood, and says that already some of the players have remarked that his approach is to tell them to go out and enjoy themselves. "Some of the best teams in the world are those who just go out and play. Pure—that's what the game is all about. But you must remember that if a thing is to be fun it also calls for a lot of hard work.

"Old fashioned I may be—but I am getting older after all—but I do have principles. I believe in working hard and in being honest.

"When Mrs Thatcher, a former student of mine, became leader of the opposition I wrote to congratulate her. I said that the thing I tried to teach was the First Law of Thermodynamics. Translated loosely it means you can't get something for nothing."

Tim Albert





The two worlds of Sir Harold Thompson : above, Oxford and Cambridge play their annual football match at a half-empty Wembley and, below, England are on the attack against Switzerland during one of many frustrating internationals in recent years.

Stage set for battles about the place of social work training

Bitter disputes tore North East London Polytechnic last year when it admitted a social work student alleged to have failed the polytechnic's normal selection procedures. In the course of the wrangle there were two applications to law, threats to close down the social work course and spasmodic boycotts of lectures by both staff and students.

The strength of feeling aroused by the case, which is now being considered by a High Court judge, astonished many academics both inside the polytechnic and elsewhere. But as long ago as 1976 Miss Olive Stevenson, a social work professor, predicted that the stage had been set in higher education for "wily academic intrigues" about the place of social work training in polytechnics and universities.

With over 4,000 students entering higher education every year for social work training, the subject is a large and important part of the academic scene. But it is also a turbulent one, characterized by administrative overlap and conflict, and confusion about its intellectual identity.

One reason for the turbulence is that there are too many fingers groping uncertainly in the social work pie. The Department of Health and Social Security has overall responsibility for social workers, but they are trained almost exclusively in polytechnics and colleges. Local authorities are the main employers of social workers, but also "control" the polytechnics in which they are taught. The ring is held by the Central Council for Education and Training in Social Work, a body supported by the DHSS, but officially autonomous.

The NELP case is the most exotic example of how this diffusion of control can provoke conflict and misunderstanding. But there are less dramatic administrative conflicts which, in the long run, might have a more far-reaching impact on social work departments.

One of these is the dispute between the CCETSW and many polytechnics about how many staff should be assigned to social work students. Both the council and the majority of social work tutors are adamant that the subject must be treated as a special case when polytechnics are working out their staff-student ratios.

While polytechnics strive hard to stretch their staffing ratios the CCETSW insists that social work departments, which have to supervise many students in field placements, and rely on small-group and tutorial methods, need to be generously staffed. The council's position is that there should be a specifically social work tutor for every ten social work students, but when polytechnics calculate their staffing ratios they add in all the non-social work teachers who make a contribution to social work courses.

The different ways of counting lead to serious differences of opinion between polytechnics and the council. At Middlesex Polytechnic, for example, the CCETSW has expressed serious concern about the understaffing of three social work courses, while the polytechnic directorate maintains that the staff-student ratio, calculated its way, is as generous as 1:4.

Nor is disagreement about the resourcing of social work courses confined to polytechnics. Until last year University Grants Committee money for social work education was earmarked, but social work departments in universities now have the difficult task of making out a special case for their discipline in competition with many others.

In universities, moreover, there are serious differences of opinion with the CCETSW about the wider academic status of social work training. One of the council's main jobs is to "recognize" courses as qualifying for the certificate of qualification in social work. This validating role brings the council into contact with the Council for National Academic Awards, but in the polytechnic sector, according to Mr Reg Wright, its assistant director, there is little argument between the two councils.

But universities, he says, tend to be less used to professional bodies interferring in the running of their courses. A full third of the university courses reviewed by the council have been recognized for less than five years because some features were not satisfactory.

"Universities simply are not accustomed to a body like the CCETSW having a view about their courses", Mr Wright claims.

The tensions between the council and the universities and, to a lesser degree, the polytechnics, stem from the uncertain academic identity of social work training. Although clearly providing professional and vocational preparation, CQSW courses are often run by academic departments as part of wider degree courses. The status of "social work skills" as a body of academic knowledge distinct from social science disciplines is a matter of fierce controversy.

The issue has come to a head with the publication by the CCETSW of a consultative paper designed to tease out a common statement of aims for CQSW courses. Miss Priscilla Young, the council's director, points out in the report that while local authorities have fairly specific job-related expectations from social work courses, "social workers themselves seem to hold a variety of expectations of their training, and those who teach, whether in universities, colleges, or in practice, have their own, sometimes idiosyncratic, objectives".

With an earlier document published by the British Association of Social Workers, the CCETSW paper marks the first attempt to establish a core curriculum for social work courses, and as such has been dismissed by some academics as a "black paper for social work education".

It certainly pulls no punches arguing forthrightly, for example, that action to change public policy is political action and therefore outside the daily responsibility of social workers.

The CCETSW has asked for responses to its consultative document by the spring, and hopes to be able to publish a policy statement within the next two years. But the black paper has already been given a public drubbing in the columns of the influential social workers' magazine, *Community Care*.

In an open letter to the council, a Birmingham University lecturer, Mr Roger Evans, describes the CCETSW model as "individualistic, rooted in psychological reductionism and a conservative social philosophy."

It is already clear that by broaching the relationship between sociology and social work, and attempting to define the aims of social work courses, the CCETSW has opened up an academic Pandora's box of significant proportions. For years social work has been uneasily sandwiched between the welfare state on the one side and the supposedly objective social science disciplines on the other. Added to the existing problems about organization and resourcing, the CCETSW initiative could mean that the social work dispute at North East London Polytechnic will be the fore-runner of many more.

Peter David



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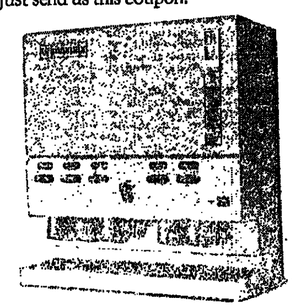
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Norman Evans examines a postgraduate course where variety is the key concept

American clues to in-service teaching courses

How to satisfy both professional and academic requirements? That is the most sensitive question for those who try to design satisfactory in-service award bearing courses for serving teachers, whether at diploma, first or second degree levels. Almost us a professional ritual, teachers will tend to complain that courses are too academic—this won't help me with my class on Monday morning.

Correspondingly the academic ritual is to tend to complain that courses on the development of teaching skills are too vague—can we be more precise than "approaches to teaching mixed ability groups"? Behind the ritual however lies the reality. What academic requirements, what professional requirements, are appropriate for these courses?

There are many possible answers but a master of education programme offered by a graduate centre in America has some interesting clues. The stance of the 14 months part time course is clear if controversial; "It is no longer possible to standardize the courses of study that an educator should pursue—there is too much to be known, there is too great a variety among the starting points and the circumstances and setting in which the educators' practices are too diverse".

The basis of the course is to find "some way . . . an individual learner, the educator, can create and organize his/her own curriculum". It is assumed that students on the course have mastered the content of their first degree. Every student has to have a teaching appointment or have arranged a volunteer or "student" teaching practice.

And since the commitment to individual learners creating their own curriculum is addressed to experienced teachers who continue teaching while following the course, then the M.A. programme as a whole raises sharply the issue of satisfying academic and professional requirements.

Professional requirements govern all else. That is the starting point. Academic study is arranged to support professional development. The commitment to arranging individual programmes of work for individual students necessarily means detailed specifications of work in either professional studies or academic courses cannot be completed before any entry of students has begun their course.

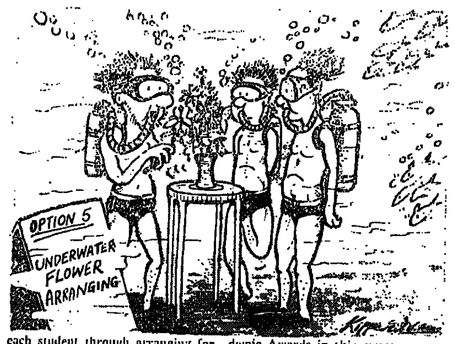
Responsibility is thus squarely on the graduate centre to find out quickly what should constitute the academic and professional work of each student. The vital issue is how the centre manages to make sure in these circumstances that it all adds up to a proper set of academic and professional requirements for a master's degree.

By putting practical teaching at the centre of each student's programme the graduate centre tries to meet the professional requirements of the master's degree for serving teachers where it matters most; in the classroom. The work of the first semester prepares for the teaching the student will do in his post during the year of part time study on the master's course.

That teaching amounts to half of the work load of the part time study year. It is thoroughly supervised through observation, videotape, tutorials and further preparation. The work of the second summer semester and the dissertation is planned by the student and supervising tutor in direct relation to the practical teaching.

And since the same tutor is responsible for agreeing with the student all the other items of his programme, the whole is worked out in the light of the strengths and weaknesses displayed in practical teaching. The professional commitment of the course thus stands clear. But of course problems and tensions arise and these are not always easy to resolve.

Academically the graduate centre attempts to meet its proper requirements through insisting on a prescribed significance of study. The emphasis may be strongly on students' individual programmes, but there is no course supermarket in sight. It seeks coherent study for each student through arranging for tutors to work with the same group of 10-15 students in a variety of ways, drawing together differing parts of the course.



The same tutor leads the discussion/seminar group which is the main engine of the course, supervises the practical teaching and is responsible for agreeing with the student his selection of formal academic courses, activity groups (based on dance or photography or music or paper craft for example) topic groups (a professional interest group) and the master's dissertation which rounds off the programme. In many ways, that single tutor acts as a personal academic validator of his students' studies.

All programmes have to be agreed then between each student and the director of the MA programme in a personal tutorial. A committee of tutors vets all the programmes for each course entry of students. The centre has a director of studies who is responsible for the academic standards of all courses.

The centre itself is subject to audit visits (validation) from its parent institution and the regional association of secondary schools and colleges. At every level therefore there are constraints to ensure the academic validity of each M.A. programme of work.

The problems which inevitably arise from trying to keep faith with both academic and professional requirements in a course of this kind are treated as matters between the graduate centre and its students. As with the Council for National Academic Awards in this country, once authority is given to teach an academic programme the institution accepts all responsibility for it subject only to reports and periodic "audits".

Given the kind of contractual relationship each student has with the graduate centre for his own programme, students and centre together have to try to find answers to the problems as they interpret this commitment. There are several ways of attempting to do this. Apart from the tutorials which play a major part in the teaching, and where a good deal of the sorting out properly takes place, the regular meetings of the discussion/seminar groups symbolically called support groups have a tutor as leader but the work to be undertaken is determined largely by students themselves. This is where any and every dissatisfaction with the course can be declared. This is where the tutor acting as a facilitator and student members pooling their own knowledge and experience can answer many of these dissatisfactions even if they cannot be removed.

It is in the support group meetings that students sometimes get anxious, even disturbed, at finding that "organizing his/her own curriculum" implies considerable personal responsibility in deciding what they want out of the course, and that it is no good expecting tutors to prescribe in detail what work should be done.

This is also where something called "course generation" begins. It is crucially important to the strategy of the whole course. The idea is simply that each support group compiles a list of academic courses it would like to see available given the particular interests of its members. While students sign up for courses on a composite list the centre tries to ensure that each request can be staffed either by full-time tutors or by part-time "adjunct faculty" specially employed, provided that 10-15 students sign up to make an economically sized teaching group.

The difficulties are obvious. Not every suggestion is acceptable academically even though topics are argued out in the Support Groups with the tutor playing the part of academic guardian. Not every student can have every course he wants.

Most serving teachers have firm ideas about what in-service courses ought to be doing for them. The American teacher/students on this MA course urged their views forcefully, articulately. The course costs $4,000 and most of the student teachers have to foot the bill themselves knowing it will be two or three years before they can recoup the cost, if they are lucky. So when they complained they felt and sounded like consumers who had been sold a pup.

And since as well as footing the bill they had all voluntarily put their day to day teaching in schools under detailed scrutiny of tutors as part of the course, these teachers on a part-time MA course felt they were getting supervision professionally if things did not meet their expectations. All this puts the graduate centre and its tutors on the rack because of the continual risk of being tugged away from academic study of the conceptualization of professional problems towards pragmatic answers to today's classroom queries.

The evidence is strong that the course does its work well in the American context. Schools systems and employers find the M.A. course in good regard. Generally its students are successful in their later careers. "Audit" validation reports are favourable and supportive. Applications lists are full and growing. It really looks as if both academic and professional requirements are met to everyone's satisfaction.

This American programme is certainly not a model ready for instant adoption here. The difference between the two education systems rules that out. However it may offer a clue or two here for designers of in-service courses.

The author is research fellow at the Cambridge Institute of Education.

Towards a personal student ratio for each staff member

There is no topic more likely to generate friction in schools, colleges or universities than discussion about the equivalence of teaching loads. Take the example of two college lecturers with class contact times of 16 hours a week. In fact there can be substantial differences in teaching commitments when both are satisfying the terms of their contracts.

There is a vast difference between being available in a laboratory during an afternoon practical session (three contact-hours), through supervising half a dozen students in a problems class (two contact-hours), to the preparation and production of a lecture for 100 students (one contact-hour).

What tends to happen of course is that the more demanding parts of the teaching and the least taxing are shared around because there is no readily available means for calculating the worth to the course or the department of a particular piece of teaching.

The crudeness of class contact-hours as a measure is made even more obvious when considering a mix of courses. There are the problems of part-time, evening and sandwich courses, and those which do not last for a full year. How many hours should be allowed to a person who runs a three-week course for 15 people?

One polytechnic's solution was outlined (*THES*, March 5, 1976) using the student contact-hour (one hour in contact with one full-time student) as the basic quantum of activity.

This failed however to come to terms with the basic issues in estimating equivalence. For example the relative worth of different teaching activities was not considered. An hour spent with 10 students must count double compared with an hour spent with five, even though the time with the smaller group may be judged a more important part of the course.

It is surprising that colleges have not turned to the one method which clearly defines the teaching load of individual staff, particularly when that method relies solely on the single and best understood statistic of the staff-student ratio—more precisely the staff to full-time equivalent student ratio.

Although widely accepted, this ratio has not been used as a measure of individual staff teaching load because the concept of calculating a personal student ratio for every member of staff has never been appreciated.

The concept can be easily misunderstood. During the course of a year a member of staff may have a teaching responsibility (lecturing, organizing practicals, setting, problems) for 100 students. This does not mean a personal student ratio of 100, because of course other members of staff will also contribute to the teaching of these students.

The personal student ratio for a member of staff is the effective number of full-time equivalent students for whom he is responsible. In the extreme, if a tutor is the only person who teaches a course of 12 people then, if he does not teach on any other course, his personal ratio would be 12.0. If he only taught half the course his ratio would be 6.0, a third 4.0 and so on.

Allowances for teaching on other courses would naturally form an additional part of his ratio. Take the example of a lecturer with a varied load of part and full-time students. For the full-time courses he is assessed as contributing 20 per cent of the first year course (20 students), 10 per cent of the second year course (15 students), and 5 per cent of the final year (only 10 students). His personal student load would therefore be 20 × 0.2 + 15 × 0.1 + 10 × 0.05 = 6.0 for full-time courses.

At the same time he is assessed as contributing a fifth of the teaching in a part-time course attended by 25 students (full-time equivalent for each student being 0.5). His teaching load for this course would therefore be 25 × 0.5 × 0.5 = 2.5 students. If he was also responsible for 60 per cent of one short course attended by 40 students (full-time equivalent 0.1), this would add 40 × 0.6 × 0.1 = 2.4 students to his load. While the supervision of four students during their industrial sandwich year (full-time equivalent 0.2) would increase this by another 4 × 0.2 = 0.8.

For this particular lecturer his personal student load or ratio for the year would be 6.0+2.5+2.4+0.8 =11.7, and a similar figure could be calculated for every other member of staff. Within a department the average for all staff would, of course, be the departmental staff to full-time equivalent student ratio.

The most obvious attraction of using the personal student ratio as a measure of teaching load equivalence is that the idea is so simple. The arithmetic may be tedious, but the end result is an index for each member of staff which is easily understood, and immediately comparable with that for other staff, and with the figure for the department or the institution as a whole.

Yet within this basic simplicity is a technique which allows a fair comparison between the different contributions of staff to full and part-time courses and the whole variety of teaching activities and arrangements which can exist in a department.

A member of staff who organizes short courses can have his contribution to the teaching of the department properly evaluated, not in terms of the crude figure of number of hours in contact with the students, but as part of a calculation of the number of students taught and their effect on the overall staff-student ratio in comparison to teaching loads on other types of courses.

It can, for example, be calculated how much relief during the remainder of the year a lecturer requires when he is involved with a series of courses at a particular time in the year. If the short courses are arranged after the planning for the year is complete then suitable allowance can be made in subsequent years.

The use of the personal student ratio is also sufficiently flexible to allow for issues such as the load on part-time staff and the differences in ratio which should exist at the various levels of departmental responsibility to be considered. If the average for the department is 10.0, what should be a desirable figure for a principal lecturer or a newly appointed member of staff?

The solution of the personal student ratio concept to these problems displays, above all else, its main advantages. It is for the staff of the department in boards of study, or whatever, to assess together their personal contributions to the teaching activities of the department. Full-time equivalent allowances for students on block release and part-time courses will be stipulated by the college or the authority.

For inter-departmental comparisons and arrangements involving service teaching between departments these allowances must be accepted. Within individual departments they can, of course, be varied, so long as it is realized that the overall staff-student ratio which results may be different to that calculated for the department by the institution, and that the figures produced are for internal department use only.

Each course then has to be analysed until an assessment of the contribution of its component parts to the total course is agreed. If a full-time year course consists of 10 lectures a week, 12 hours of laboratory work, two problems classes and a tutorial, staff may assess their respective contributions to the whole of the course as 60 per cent, 30 per cent, 5 per cent and 5 per cent.

A member of staff giving one of those lectures per week for the year would therefore be considered as teaching 6 per cent of the course. If his lecturing load only lasted for one term this would be 2 per cent. Two lecturers sharing the practical work would each receive 15 per cent. If one was assessed as having more to offer than the other, possibly in terms of experience or time, then the figures could be adjusted.

The method is not restricted in its applicability to college departments. Large university departments, such as a school of education with staff simultaneously supervising teaching practice as well as other full and part-time students, would find it a valuable mechanism for assessing teaching loads. The calculation of personal pupil-student ratios may not eradicate friction over teaching loads, but its simplicity, flexibility and openness should make it a great improvement on previous developments in this field.

W. F. Dennison

The author is a member of the higher degrees and research division of Newcastle University's School of Education.

University research and the community

In university circles one frequently hears the argument that research cannot be planned except by the researcher himself. The motive behind this attitude is both noble and utopian. It is the motive for the so-called autonomy of the university. Who could, a similar argument goes, except the university itself, decide which research should be pursued?

I believe that this isolationist's attitude in its strict form has to be rejected on several grounds. The researcher at the university is very often paid by the community, and it is only natural that this community, especially in times of scarcity of means, expects a return, now or in a distant future, from what the researchers do. Furthermore, a good many universities are neither organized nor prepared internally to self-administrate research funding. In a republic of kings any consensus would indeed be hard to reach!

Thus we have to accept that the state will decide at least on the level of supply universities receive. If a state supports more than one university, it is inevitable that public money be shared and this requires a process of planning by the state. Universities, however, should study the conceptualization of professional problems towards pragmatic answers to today's classroom queries.

Once a university has received its share of public funds, it should put an intelligent structure to work in order to ensure an internal distribution of the money permitting as much good research work as possible. This structure must be both sufficiently intelligent and powerful to be able to recognize—and support—good research and to recognize—and not support—poor research. Indeed, what good can bad research be?

The results of this effort should become evident when the university defends its case in the next round of planning at the state level.

In some countries, governments and politicians will not be satisfied with this *modus operandi*. Rather, in response to popular demand and/or real insight, they will demand that special topics, dealing with so-called national needs, receive special support. This notion is sound as long as our best scholars—both inside and outside the universities—are engaged in formulating and executing such programmes. These programmes need not curtail the freedom of research as long as each researcher is free to participate in them or not.

If the launching of such programmes helps to re-establish the publics' confidence in the social awareness of researchers, the universities should then support the idea. According to this model, it is again at the state level that one would decide what fraction of research money is to be earmarked and what part is set aside for those university researchers who choose to participate in a particular programme.

Mutatis mutandis, the same procedure for the support of research in selected areas is also possible at the level of each university, which, in this case, has the charge of the selection of the topics.

The question has also been raised as to whether the quality of research can be planned. I believe so: specially when one proceeds to professorial appointments. Universities indeed would be well advised to rely heavily on outside experts in choosing new members of the faculty. The quality of research is a direct function of the quality of the researcher. No university can conduct good research without good researchers. The research policy of a university therefore depends on the policy of professorial appointments; one has to select specialists for the unexpected.

So much on the planning of university research. Now some insights from our discussion on the so-called social relevance of university research, both in social sciences and humanities and in the natural sciences. Whether we like it or not, the call for social relevance exists. We could respond to this call by ignoring the matter, convinced as we are that these discussions are rather futile. I am afraid that this defensive attitude will not lead us very far in our struggle for support.

Instead, we should choose to attack. Can anybody earnestly challenge the view that research in political economy is important in the formation of political economies? That insights in the causes for success and failure of the past—in political sciences—are important for finding better ways of decision-making processes in the present and in the future? That an ever-increasing scholarly knowledge of the jurisprudence is a *conditio sine qua non* for better laws and better law practice?

And who would deny the avid interest of numerous people in developed nations for scholarly discoveries—and therefore research—in Egyptology, for instance, as shown by the large sales of corresponding books? And of literature research in wines (the large sales of good—not only bad!—books)?

Similar questions were raised as to sociology, but the answers remained a bit vague, perhaps because the subject is a particularly complex one. May it be easier to find the answer, because, as one member of the conference put it, each branch of the social sciences and of the humanities may have to defend its own values and therefore prove its social relevance.

Much of what was said about humanities and social sciences also applies to natural science. Its goal, too, is to augment knowledge. For the scientific community, this constitutes a value in itself but not limited to the so-called basic research; it is equally valid in the so-called applied research, particularly when, by making engineering sciences more scientific, the border between these two fields becomes less precise.

Even though the scientific community may have reached a consensus on this issue, two areas of dispute remain between natural science and the public: the ethical issue, and a political controversy.

It is a political fact that the public wants to be informed by the researcher in natural science (and also in engineering) of the potential hazards of his work.

There exists a widespread mistrust of the public as to the readiness of scientists to take up this added responsibility. Just how this serious problem should be solved merits earnest discussion and study: it is imperative for the natural and engineering sciences to regain the confidence of the people.

Whether we like it or not, the public wants to know the usefulness of research in the natural sciences, much more so than in the humanities, mainly because of the enormous costs of research in the natural sciences. But this does not always constitute a problem: medicine and chemistry, for instance, in their daily application furnish ample proof of social relevance.

The public is right to expect this relevance as long as this does not interfere with the freedom to carry out creative research, with the freedom to choose one's own method of approach. But one has to qualify this latter demand for the public may not always be in a position to appreciate the choice of method, again for financial reasons.

Our Zürich researchers in the structure of matter, accustomed to the use of neutrons for their experiments, were faced a few years ago with the fact that our technical schools could no longer afford the necessary reactor and research equipment. By closing down this reactor we indeed severely reduced the freedom of choice of method. I may add that the resulting problem was solved by resorting to international collaboration. Making equipment for big science available is certainly one of the most beneficial forms of international cooperation.

In spite of some doubts on this issue I do not think that this conference meant to convince its members of the value and usefulness of university research. We all believe in it. But the conference recognized a need for increasing our efforts to convince a broad public and its representatives in politics, both of the so-called social relevance of research and of its ethical implications.

Heinz Ursprung

The author is President of the Swiss Federal Institute of Technology in Zurich. This article is based on the final report of Professor Ursprung to a conference on the social relevance of university research organized by the Conference of the Rectors and Vice-Chancellors of European Rectors (CRE) in Zurich in November. It first appeared in CRE-Information.

Maurice Cranston on the European University Institute

The university of the future

Since the beginning of January I have been a Eumeral of sorts, having been seconded from the London School of Economics to the European University Institute in Florence as a professor of political science. The Institute is not yet a complete university; it is a small graduate school and research institute with a dozen professors, a few lecturers and some 60 students and the only departments so far set up are in history, economics, political science and law. The entire faculty is made up of visitors from universities within the EEC on contracts of not more than three years, and the students come in proportionate numbers from each of the nine member states.

For someone who has spent, as I have, 20 years as such a cosmopolitan citadel of the social sciences as the LSE, there is nothing strange about the European University Institute. I meet the same sort of people doing the same sort of thing, and only the scenery is different. It is almost as if the LSE itself had been diminished to one-twentieth of its usual size, and translated from its usual bleak home in the Aldwych to the hills near Fiesole and housed in a magnificent renaissance building set in landscape from a *quatrocento* painting.

The institute occupies the restored monastery of the Badia Fiesolana, which Cosimo del Medici built and where Ficino and Pico della Mirandola and the other Florentine Platonists revived classical—or pagan-philosophy. From my room I look across vineyards and olive trees to the spires and roofs of Florence, the Palazzo Vecchio, the Duomo and Santa Croce, an unspoiled panorama of the city where nearly all that is good in modernity began, as well as a few bad things, such as the utopian radicalism of Savonarola and the immoralism of Machiavelli.

The past lives on in Florence. The European University Institute, however, is something for the future. And although it has been set up by the EEC, it did not originate in the minds of politicians at Brussels. It is the outcome of various initiatives among university people themselves.

I remember one entirely non-governmental conference at Basle in 1964, attended by such eminently sensible men as Richard Hoggart, John Wain, Fosco Maraini and Raymond Barre (he being then simply a university don), at which the case for establishing a European university was proclaimed with notably compelling clarity.

Among other recommendations was one that the future European university should be structured "sur la base, non des facultés traditionnelles, mais de départements, facilitant ainsi le travail interdisciplinaire", and another that priority should be given to subjects related to the problems of an integrated Europe: "droit, économie, sciences sociales et politiques, histoire, civilisation Européenne"; and these proposals which owed more to Anglo-Saxon empiricism than to continental Cartesian rationalism, came to be adopted.

I think it a pity that the image of Europe which dominates so much public discussion is that of an economic union or *Zollverein*; in any case, the institute rests on a different and less materialistic conception of Europe, namely that of Europe as a cultural whole; it answers the demand for an institution to match the universality of experience.

Until as late as the French Revolution, all educated Europeans felt themselves to be creatures of the same civilization, the common heirs of Christendom. It was only in the nineteenth century, when nationalism prompted linguistic groups to look inward in search of political identity and when imperialism made European Kingdoms rivals in the race to spread their rule overseas, that educated Europeans lost their proper sense of their character as Europeans. In recent years that consciousness has come back to us, as well it might, considering the melancholy spectacle afforded by political and cultural life in most other parts of the world.

"Going into Europe" is good for the British soul. Our old relationship with the Empire provided the masculine satisfaction of dominion; our "special" relationship with America gives the feminine pleasure of submission, but Europe offers the more bracing experience of meeting our neighbours on equal terms.

Even so, we who come from the British Isles have several advantages, one of which is that English is becoming the lingua franca of Europe. At the European University Institute the official languages are all the languages spoken in the member-states of the EEC, but the actual working languages are English and French, and I would express myself, as a vice-president of the Alliance Française, wish to see French in any way diminished; but where English is the most-used language, and where Americans are absent, the Englishman is in demand.

It is hardly astonishing that three of the first 12 professors at the European University Institute should come from England, Charles Wilson of Cambridge and Andrew Shonfield of Chatham House being my compatriots, as is the librarian, Kenneth Humphreys. The president of the Institute is Dutch, Dr. Max Kohnstamm, the chairman of the *conseil supérieur*, or governing body, is German, Dr E. Böning, but higher still in the stratosphere of Brussels is another English name, that of Professor Roy Jenkins, the President of the E.E.C. Commission.

So far I have not made the acquaintance of any British students, but two or three of those assigned to me for supervision are interested in "British" subjects; a Dutch boy, for example, whose thesis is to be about F. H. Bradley, and an Italian girl, who is working on Jeremy Bentham. It is salutary to be reminded that Bentham was a *philosophe* in the eighteenth-century mould, influential in France before he was influential in England, and that Bradley belonged to the intellectual succession of Hegel, for in England one is apt to treat both philosophies as national institutions.

Florence itself is almost an English-speaking city, and I myself, despite many years of marriage into a Florentine family, have never really mastered Italian. My earliest memories of Florence date from soon after the war, when I stayed with Francis King, then a young official of the British Council, in a villa above the Poggio Imperiale.

One could still in those days live fairly cheaply in the style of Browning or Ouida, with a butler in white gloves, and even a gardeners and *contadini* picking the grapes and olives; but all that has changed with inflation and the migration of workers to industry, and while I have various relations and friends who still maintain their dignity in the lofty, draughty drawing-rooms of their splendid villas, one is lucky nowadays to have a small apartment in a noisy palazzo, boiling one's own egg.

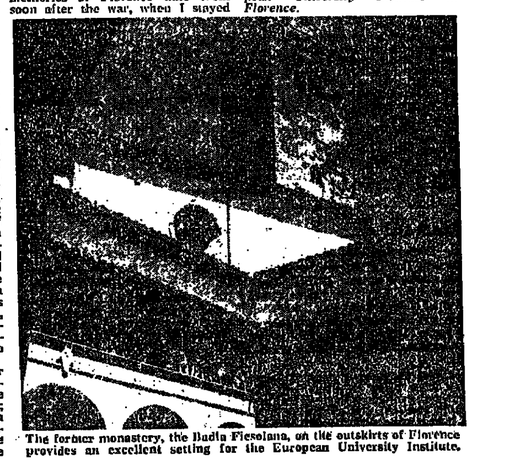
The European University Institute is not part of the Italian university system; nor do I wish that it were, for they are the victims of government parsimony on the one hand and of political violence on the other: one needs no Professor Gould in Italy to reveal the extent, and the ruinous consequences of ultra-Left penetration into academic life. Yet excellent work is often done in Italian universities, as the University of Florence, for example, political science flourishes, despite the recent departure of Giovanni Sartori for Stanford, philosophy thrives (the shade of Croce yielding ground to the light of Locke and Wittgenstein), and history remains an important local industry.

We meet our graduate students at the institute in weekly seminars; those of my own group this year is "The State", and while I admit having copied the title from the political philosophy seminar in which I once participated with Raymond Polin at the Sorbonne, this subject seems to me especially appropriate for Florence, where the modern conception of the state originated, the very word "*lo stato*" being introduced into the language by Florentine authors.

My own activities are centred on Rousseau, but Machiavelli is the theorist whose presence one feels most keenly here. And much as one disapproves of him, and wants to dissociate oneself from his advice to the prince, now a museum in which his furniture and clothes and books are lovingly preserved, is for me a place of pilgrimage. For Machiavelli was surely the best literary stylist of any political philosopher, and one may believe of him, as Auden wrote of Claudel, that God "will pardon him for writing well".

Life in Italy offers few surprises to anyone who has lived through the post-war years of British bluff and muddle; the Italian Christian Democrats are as keen on economic planning as our own Conservatives, and the Italian Communist Party is as valiant for order and tradition and privilege as is the British Labour Party; Italian criminals are bolder and more successful than our own, the workers are no less prone to strike, the young are even more "alienated" and the corrupt more prosperous. But I like it here.

The author is professor of political science at the London School of Economics at present on secondment in the same role at the European University Institute in Florence.



The former monastery, the Badia Fiesolana, on the outskirts of Florence provides an excellent setting for the European University Institute.

BOOKS

Working a passage to America's Gilded Age

Work, Culture, and Society in Industrializing America: Essays in American Working-Class and Social History
by Herbert G. Gutman
Blackwell, £10.50
ISBN 0 631-18450 3

In American universities the no-book man is barely deemed to have the right to exist; the one-book man may be accepted indulgently if still young; multi-book men are, on the other hand, forgiven most omissions of character and teaching. From the late 1950s until very recently H. G. Gutman defied these principles, winning respect, fear, and promotion as a social historian while still suffering from the normally unenviable status of a no-book man.

Gutman owed his strange prominence to a series of articles in which he displayed a will to live by the sword, attacking elitist-minded social historians who did not view their subject "from the bottom up". This book is Gutman's long-awaited attempt to exhibit the virtues of the "new social history", though in his prickly way he complains that this phrase "pleases but also disturbs" him.

Work, Culture, and Society is an anthology of articles and essays published by Gutman between 1959 and 1973, with the order of publication roughly reversed so that the opening, introductory section is "an overview" of the earlier articles, which are unrevised and grouped into further thematic sections.

In his opening essay, "Work, Culture and Society in Industrializing America, 1815-1919", Gutman acknowledges the influence of British left-wing historians and suggests parallels between certain European and American disorders. Election day disturbances, he thinks, may have been the United States equivalent of "Church and King" outbreaks. He argues that food riots were similar on both sides of the Atlantic, failing to perceive that the American disturbances he describes were more in the nature of price riots. Gutman notes the absence of Luddism in America, but does not try to explain it. Were machines beneficial to labour in a country that was relatively short of workers?

Gutman borrows from E. P. Thompson in arguing that an understanding of working people's "pre-industrial" culture is essential to an appreciation of the stresses and conflicts to which the inhabitants of industrializing America were submitted. But he departs from the European model in asserting that the recurrent nature of clashes between agrarian and industrial people has been a distinctive feature of American history. Industrialization in Britain was sharp but short; in contrast the influx to United States manufacturing cities from rural America, Ireland, Poland, Italy and Mexico continued for more than a century. Within the context of previous studies of nativism, Gutman makes the valuable point that social tensions were created as much by the process of industrialization as by ethnic differences.

Gutman objects strongly to the efforts of historians who attempt to describe what the American worker has become, without first explaining what he was previously. He explains that work discipline was a new concept to rural workers who had thought nothing of taking holidays at random to marry, drink, or recover from the effects of these activities. According to Gutman, there was a period when the majority of industrial workers in both Europe and America turned up promptly on Monday mornings to work without remission or hangover—a period that to me seems almost magical.

Gutman maintains that the prospect of factory discipline converted quiescent rural workers into rebels. But one might ask whether the habit of resistance was not ingrained, and whether rural overlords had been so very lenient in matters of work discipline. To speak of a "pre-industrial" man is to mould one's image of the eighteenth century peasant to one's conception of what he ultimately became, which defeats Gutman's object in looking at him in the first place.

In the next "overview" chapter, "Protestantism and the American Labor Movement", Gutman tries to show how apparently archaic forms of Protestant belief, particularly "perfectionism", helped workers to come to terms with industrialization and excited them to agitate for forward-looking and humane reforms. He does succeed in showing that workingmen's leaders in the Gilded Age (the 1870s and 1880s) based much of their rhetoric on the Bible.

But his essay on workers' Protestantism is seriously flawed. He does not explain the common recourse to biblical language, failing to relate it convincingly to ante-bellum perfectionism. He does not distinguish philosophically between the progressive social Christianity of workers and what Henry May termed the "facile optimism" of their bourgeois equivalents. The Catholicism of Knights of Labor Grand Master Terence V. Powderly and the Jewishness of American Federation of Labor President Samuel Gompers are glossed over.

In his section called "Black Coal Miners and the American Labor Movement", Gutman concentrates on the career of Richard L. Davis, a black on the national executive board of the United Mine Workers of America. This essay on Davis's organizing activities is a foray into the little-known history of coal miners in Kentucky, West Virginia, and Alabama. The author argues on the basis of significant black enrolment and activity in the UMWA that historians have overemphasized the growth of race discrimination in the American labour movement of the 1890s. He is sceptical of the view that black "scabbing" created race prejudice among rank and file union members, who in turn forced Gompers and other national labour leaders to embrace Jim Crow practices. Black strike-breaking, he asserts, occurred in the coalfields, where the UMWA continued to welcome black membership; race prejudice took root in industries unaffected by this provocative activity. He suggests that race prejudice, like ethnic prejudice, had an important but not a crucial effect on social history.

This is reasonable enough, but it should be noted that UMWA toleration was born of necessity. The UMWA was by the 1890s a union of semi-skilled workers because of the introduction of machinery; unlike unions that had a monopoly on skill, it could not afford to discriminate against blacks since they were potential strike breakers. The black "scabbing" that occurred in coal strikes had to be tolerated by the UMWA itself, but the craft unions (the backbone of the American Federation of Labor) drew all-too-obvious conclusions from the phenomenon, and turned against the blacks. They were further encouraged to do so by major defeats of black strike-breaking outside the coalfields, such as in the Chicago teamsters' strike of 1905. But Gutman has more than made up for these oversights by exploring the industrial history of the borderland states and revealing a vital new prospect for further research.

The concluding chapters in *Work, Culture and Society* are devoted to local history, the author's method of achieving a grass-roots view of Gilded Age events. In a section entitled "The Industrial City", Gutman discusses social mobility and community power in the engineering and textile town of Paterson, New Jersey.

Gutman criticizes Stephen Thernstrom's study of social mobility in late-nineteenth century Newburyport, Massachusetts (in which Thernstrom cast doubt on some of the more optimistic assumptions about the openness of US society) on the ground that Newburyport was no longer a dynamic economic community after 1850. Paterson was, and on the basis of a detailed examination of four artisans who became successful capitalists, Gutman concludes that men *did* get ahead in Gilded Age America. It is a pity that he has not revised this section to take account of Thernstrom's later work on Boston which revises the Newburyport thesis and advances the view that it was easier to get ahead in America than in Europe. Gutman's opinions on social mobility are unrefined; for example, he has not examined the parental backgrounds of his few exemplary businessmen.

More inspired is his examination of class and status as it affected strike-bound textile capitalists in the 1870s and 1880s. He shows that in many cases they established middle class in Paterson sided with workers against their employers and he suggests that this was because they regarded the textile manufacturers as parvenus (large-scale silk manufacturing was a relatively new form of enterprise in the 1870s). Bourgeois power combined with workers' power—the latter a more potent factor in an industrial town than in a metropolis like New York City—to defeat the economically strong businessmen on several occasions.

It may be objected that if the long-established bourgeois regarded the new capitalist with jealousy, he looked upon organized labour with hatred, and that workers' victories against their employers were most unusual in the depressed 1870s. Nevertheless Gutman has challenged brilliantly the assumption hitherto held by "old left" (communist) and conservative historians alike, that public opinion was heavily anti-labour in the 1870s. As Gutman suggests, anti-labour prejudice may have developed later when agrarian fear of industrial capitalism had given way to an urban fear of trade unionism.

In a postscript on industrial Paterson, Gutman maintains that what passes for a welfare state in America had its origins in workers' agitation, not middle-class reform. He takes as an example the career of one Joseph P. McDonnell, a Paterson-based lobbyist for welfare legislation in the New Jersey state assembly. He portrays Dublin-born McDonnell as a pre-industrial type who worked with the support of archaically minded workers reluctant to accept the harsh realities of modern capitalism. Although Gutman typifies McDonnell as "working-class", he portrays him, paradoxically, as a man of bourgeois background who had associated in England with Karl Marx. The origins of late-nineteenth century social welfare agitation are surely to be found less in agrarian and working-class thought than in middle-class socialism in Europe and the radical ideas expressed in urban America as early as the 1830s. Gutman is also to be faulted for ignoring the backlash often produced in United States politics by revolutionary agitators like McDonnell.

Work, Culture and Society is a book of essays on disparate subjects united by a certain methodological approach and historical outlook, and therefore vulnerable to some general as well as particular criticisms.

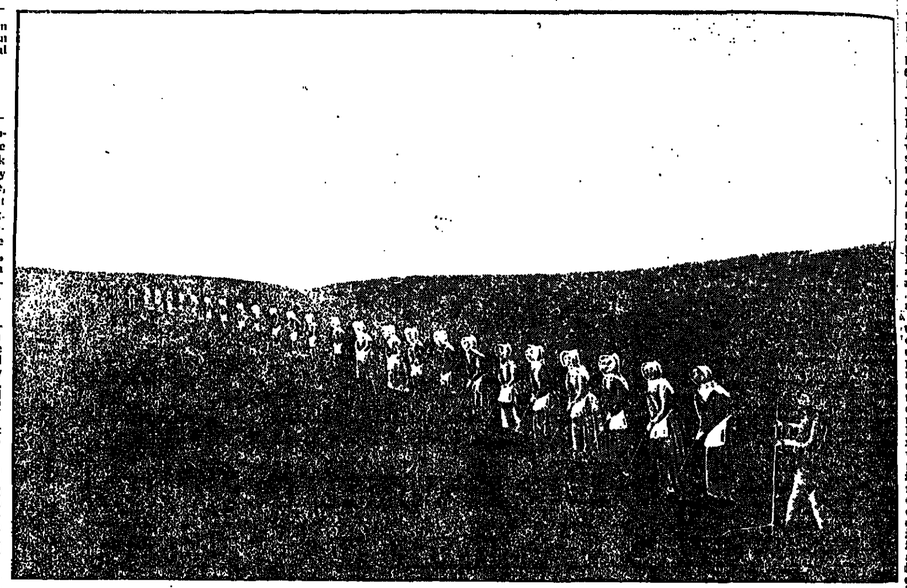
Throughout the book, Gutman writes of the "working class" in a American context but dangerously refrains from defining the term. He emphasizes the archaic "culture" of sections of the Gilded Age work force, but fails to consider the degree to which many employees may have been old-fashioned in their attitude to collective bargaining. In spite of his repetitious excoriation of the orthodox methodology of pre-Gutmanite historians he relies heavily on orthodox sources such as the *United Mine Workers Journal*. He exaggerates the degree of novelty involved in a detailed biographical-cum-local approach to social history.

Gutman's iconoclastic boldness may seem rash, but he will have succeeded even if a mere fraction of his ideas gains acceptance. One's need of disappointment over his presentation of the new social history centres not on his incaution, but on a lapse in his intellectual courage. This has to do with social violence, a subject described frequently in the book. Violence has been a concern of Gutman's since he published his earliest articles.

For example, the last two chapters in the book, originally published in 1959 and 1961, reaffirm the conclusions reached about community power in Paterson, but in the context of railroad, iron and steel strikes in Pennsylvania in the 1870s, and show that this community power to have been so strong that it compelled employers to resort to force.

The essay from which the book takes its title was originally called "Culture, Conflict, and Violence in American History" and was read to the Anglo-American colloquium of the Society for the Study of Labour History in London in June, 1968. The theme of this paper was that the cultural clashes now more fully described in *Work, Culture, and Society* caused an exceptional amount of social violence in American history. After criticisms from the floor of the colloquium, Gutman admitted that American social violence was not exceptional in degree, and since 1968 he seems to have lost interest in its causes. But this book is still, implicitly, concerned around the theme of social violence; it is an explanation of a phenomenon in which the author has ceased to profess belief.

Rhodri Jeffreys-Jones



'Women Planting Corn' (c. 1896-1900) by Olof Krans, one of many fine illustrations in Bright Stars, American Painting and Sculpture since 1776 by Jean Lipman and Helen M. Franc, published by Dutton and Co., at $ 35.00.

BOOKS

Proustian genesis

Proust's Additions: The Making of a la recherche du temps perdu (two volumes)
by Alison Winton
Cambridge University Press, £18.50
ISBN 0 521 21612 5

Dr Winton's book, derived from her PhD thesis, is aimed at students of *La Recherche*. Although starting with the concessionary gesture of a summary of Proust's "base" narrative, the first volume assumes very close knowledge of the novel. The second presents the future Proustian researcher with splendid tables of the additional material and page references to the Pléiade text. It seems fitting, therefore, to examine this "addition" to the body of Proustian criticism, which has already passed the half-century mark, for its method as well as for any new light it sheds on Proust's masterpiece.

The expansion from 1,500 pages to the final 3,000 represents the elaborations traced from the manuscripts, typescripts and galley proofs of the 1914-22 period. This mass of material Winton decided to organize around a number of themes, concentrating, she states, on the content of the additions rather than their point of insertion. Her method makes for informative reading but, faithfully adhered to, would obscure one of the most distinctive features of *La Recherche*—its patterned structure. Fortunately, the scholar giving thematic evidence occasionally gives way to the critic concerned with the existing structure of the novel. Thus, at intervals, Winton forsakes additions for relationships, making the reader aware of the distant as well as the immediate repercussions of these expansions. The end of her book, in particular, underlines Proust's skill in preventing his *surnourriture* from destroying the overall pattern.

But although they are sporadically examined as part of the complex organization of *La Recherche*, the additions are mostly studied for their effect on its tonality and fictional characters: Winton brings out their general impact on the dramatic, comic and metaphorical aspects of the book; she also shows their specific effect on the speech of the characters, for instance, and on their moral qualities.

This thematic approach can perhaps be blamed for hedging another distinctive feature of Proust's novel: its subtle mode of enunciation. One is not sufficiently aware from Winton's presentation that the level of discourse in *La Recherche* combines the fictional level. In an important sense Proust does not make alterations to his characters in a chaotic or cut-and-paste manner by this infusion of new material. He expands and alters the multiple and contradictory views of the Narrator has of them and of reality in general. With very few authorial interventions, the Narrator filters all that is enunciated in the text. The additions, therefore have reached us through his mediation and should be viewed not as an expansion of a unilinear text but with constant reference to him as the enunciative voice. However, such a refinement would have greatly increased the considerable difficulties facing Winton in her task.

To what extent has this task borne fruit? Has access to Proust's manuscripts shed a radically new light on *La Recherche*? Winton admits readily that certain of her conclusions have been anticipated by other critics. Nevertheless, there is as yet nothing to compare in scope and systematic organization with her research in this field. Theories on the genesis of Proust's novel, based on divination or partial evidence, can now receive factual confirmation or be disproved. Winton has also uncovered some new facts: Morel has gained in importance from the expansion, minor characters have been introduced. At another level, the additions show the development of death imagery, human beings becoming frequently likened to inanimate statues. In all these respects her contribution is of major importance.

Winton provides a useful index; her bibliography, apart from the odd gap, shows a thorough preparation and her sense of the importance of even such a "definitive" piece of research as hers—conditional, she warns, on future examination of Proust's rough *Cahiers*—can only induce a feeling of respect and admiration for her scholarship.

Ninette Bailey

Life-support for an improving patient

The German Novelle
by Martin Swales
Princeton University Press, £11.30
ISBN 0 691 06331 1

The theory of the German *Novelle* is still alive and kicking. Any fear (or hope) that Ellis's recent volume, *Narration in the German Novelle* (1974) had dealt the death blow with its radical rejection of any attempt to define the genre must be regarded as premature.

Professor Swales's study is more than just an artificial life-support system for a patient already clinically dead. It is an attempt to demonstrate among other things that many of those characteristics we all traditionally learnt to look out for do have life and meaning as part of the central concern of the nineteenth-century *Novelle*.

He himself describes the approach as combinational in the tradition of Martini and von Wiese. Yet it is interesting to observe how the selective he often comes close to Ellis, particularly in the careful attention paid to the narrative voice and the related matter of interpretation, that is to say, the narrator's concern to understand and give proper significance to the events before him. For he sees the *Novelle*, unlike the short story, essentially as an attempt to interpret an unusual event or events within the wider context of the values and expectations of society at large, an attempt which he repeatedly, though not very happily, describes as a "hermeneutic gamble".

The book begins with what are largely formal and aesthetic questions and concludes with sociological considerations, such as the way in which the *Novelle*, with its interest in the exceptional and its challenge to commonly held social certainties, stands at the heart of a nineteenth-century society which displays such a contradictory attitude to individualism.

Between are discussions of seven individual works, some of which, like *Der arme Spielmann* and *Die drei gerechten Kammacher*, are old favourites familiar from such studies as those of Silz, von Wiese, Ellis and others, some of which mark a quite refreshing change. This is particularly true of Stifter's *Granit* and Meyer's *Das Leiden eines Knaben*. And in general it is the less familiar works that provide the starting-point for the most stimulating chapters.

In the case of *Granit* Swales shows how the narrative method, which intimates a vast time-scale and involves a framework longer than the inner narrative, a framework embracing an apparently trivial incident and much referential naming of landscape features, is used to express the absorption of the exceptional and catastrophe into a wider security and continuity. And in the case of *Das Leiden eines Knaben* he argues that Meyer's use of the frame implies grave doubts about the value of art itself. The act of narration becomes, for Fagon, as important as the content of what he narrates; and even as it succeeds as entertainment, it fails to have the desired humanizing effect on the real world.

These are just a few random insights from the central chapters, which cannot be summarized fairly, since they rely on much detailed observation and argument, building up into a succession of valuable individual interpretations as well as a story of the changing pattern in the relation between narration and marginal events in the nineteenth-century *Novelle*. These chapters are the meat of the work, and while they lead persuasively into the conclusion, they develop rather less easily out of the opening chapters, whose theoretical considerations are only partially taken up later. The central concern with the interpretative response to exceptional characters and marginal events provides the golden thread, but its links with some of those detailed "characterisics" of the genre are sometimes lost sight of, while the important contention that the concept of the Novelle operated for many as a guiding principle in the writing of their individual works is not substantiated in the examples chosen for special consideration.

Reading the volume is not always easy. But if one is willing to chew over a style which seems at times to have been concocted from translated and transatlantic ingredients ("informationed", "societal", "literary-historical", "embeddedness", "contextualize", "narratively intimated assumptions", "conceptualizing human value constructs"), there is much that is worth digesting. Swales has laid out before us, in his theoretical pronouncements and their practical application, an approach that will prove a valuable guide through the *Novellen* of the nineteenth century and beyond.

David Turner

Messianic message

The Politics of Solzhenitsyn
by Stephen Carter
Macmillan, £5.95
ISBN 0 333 19360 4

Solzhenitsyn is undoubtedly one of the most important literary and political figures of the second half of the twentieth century. Although he himself has frequently asserted to critics and opponents alike that he is primarily an artist with an essentially moral, aesthetic and religious, rather than political message, none the less his political influence has been much stronger and more consistent than that of most professional politicians.

The Soviet authorities hope that expulsion would lead to convenient oblivion has clearly not been realized; on the contrary, as a prophet in exile he has grown in stature and authority, confounding his critics and embarrassing many erstwhile supporters by his startlingly apocalyptic tone, uncompromising moral absolutism and devastatingly forthright comments on life in the West. Unpalatable and disquieting his message may be, but it is vital that it be clearly understood, for it bears directly not only on the Soviet Union or, indeed, the West, but on the future of the modern world as a whole.

Stephen Carter's modest and unpretentious book represents a useful aid to such understanding, made the more valuable by his willingness to grasp the nettle of Solzhenitsyn's moral intransigence, stridently Slavophilian and, indeed, occasionally preposterous ideas, such as the assertion that the Soviet regime would collapse if faced with an import embargo, that socialism under Stalin fostered the rise of Hitler, or, indeed, that present-day Britain is of less significance than Uganda or Romania. Recognizing the damage to Solzhenitsyn's cause done by even a few such sweeping and ill-informed statements, and anticipating other criticisms of his messianic message, Carter emphasizes the positive side of the Russian's ideas and appeals to us to concentrate "less on the tone of voice in which Solzhenitsyn speaks and more on the content and subtle nature of what he is saying".

The author is a political scientist and the main audience for his book may be presumed to be students of politics, for while he examines comprehension of such a concept as "Gumplowician [sic] belief" he goes into some detail describing the Russian background, particularly in an uncharacteristically clumsy digression on *pochvennichestvo* (the native soil movement) just before the conclusion. There are a number of inconsistencies and absurdities of spelling and transliteration (e.g. *Dagmar Tchernyshevsky* and Pasher for Pasha) and occasional infelicities of style, but the book has undoubtedly achieved its principal aim: to elucidate clearly and fairly "purely practical purposes" the essence of Solzhenitsyn's views on literature, history, morality and politics.

The scholarship is not as a patchy as a disclaimer in the preface suggests and the reliance on "plausibility and the application of common sense" works well whenever precise documentation is not possible, while many readers will welcome the summaries at the end of each chapter, clarifying the sometimes complex arguments which have gone before. The style is generally lucid and free of jargon, so that even non-specialists, including those who have no first-hand knowledge of Solzhenitsyn's writings, should have little difficulty in following the main trends in his moral and political thinking.

After an introductory chapter entitled "Aleksandr Solzhenitsyn as a Political Writer" in which his life and career hitherto are briefly outlined (mainly on the basis of *The Oak and the Calf*) the body of the book is divided into two parts: "Literary Analysis" deals chiefly but not exclusively with *Gulag Archipelago* in assessing Heinrich Böll's image of Soviet society as a prison-house, the Soviet legal and penal systems in theory and practice, official distortions of truth and reality, human rights in the Soviet Union, and finally the essential questions of Russian history raised in *August 1914*. In the latter work Solzhenitsyn engages in a direct polemic with Tolstoy on the role of the individual in history, but elsewhere Carter rightly emphasises the writers' similarities of personality and novelistic technique.

The second part of the book, "Moral and Political Analysis", deals with Solzhenitsyn's Nobel Prize speech, the essay "Repentance and Self-limitation", his "Letter to Soviet leaders", the injunction to the Soviet people "Live not by Lies" and the treatise *Lenin in Zürich*, ending with a survey of recent interviews and public pronouncements entitled "Solzhenitsyn in Zürich and Abroad". The implied parallel with Lenin is an interesting one, and Solzhenitsyn does indeed emerge from this study as something of an anti-Lenin, exhibiting in his aims and beliefs a comparable consistency and purpose.

Solzhenitsyn's demand that morality alone dictate the internal and external policies of nations is a radical one; his obsessional insistence on the absolute and non-relative nature of ethics and justice is difficult for westerners to understand, let alone accept; his monistic view of history inevitably recalls the Marxist teaching of which he is such a fierce opponent; his strictures on the moral weakness of the West are uncompromisingly direct. But Solzhenitsyn's message, his challenging call for spiritual revival is as important as it is uncomfortable, and we in the West should be prepared to learn, both from his immensely informative account of Russian experience and, no less, perhaps, from his unlikely clear-sighted vision of our own society.

Arnold McMillin

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Routledge & Kegan Paul
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BOOKS

Exploring the frontiers of science and ideology

Proletarian Science? : The Case of Lysenko
by Dominique Lecourt
New Left Books, £5.75
ISBN 0 902308 69 6

Dominique Lecourt's fascinating and important book starts from the premise that the history of Lysenkoism has been widely misunderstood, both inside and outside the Soviet Union. Far from being a freak occurrence explainable by Lysenko's personality and his alliance with Stalin, Lecourt shows that the anti-Mendelian movement was deeply rooted in the political philosophy and agricultural practice of the Soviet Union. Most important is his desire to understand and analyse, as a Marxist, an important episode in the history of Marxism. He thus differs from most previous writers on Lysenko, who have tended to be anything from bitterly antagonistic to the Soviet Union to virulently anti-communist.

For both Lecourt and Althusser, who contributes an eloquent introduction to the book, their enterprise is a political one. But those who do not share their beliefs have much to learn from a careful reading of *Proletarian Science?* The text is clear, informative and accessible so that readers who found Lecourt's previous book, *Marxism and Epistemology* (1974) too opaque should not be deterred from coming to grips with this one.

Proletarian Science? attacks two problem areas of extreme conceptual complexity. First, it discusses general features of science and its social role, as well as specific aspects of post-Darwinian biology, and second, it sheds light on the thought of Lenin and Stalin and its effects on their political practice. Following the Lysenkoists' own testimony, Lecourt places them in the Darwinian tradition rather than the Lamarckian one they are commonly associated with. But Lecourt also points out that they rejected tenets basic to Darwin's concept of evolutionary change by denying intra-specific struggle, such as Darwin's Malthusianism, and in reinstating teleology or "finalism" in biology. Lysenko, using Engels as support, denounced the Malthusianism in Darwin. Lecourt argues that Lysenko had misunderstood Darwin in this respect. Both in their different ways separate Darwin from his sources and context, a project which ignores recent historical scholarship on the relationship between evolutionary theory and ideology. For example, it is now established that Darwin's notion of struggle was heavily indebted to Malthus's work on population.

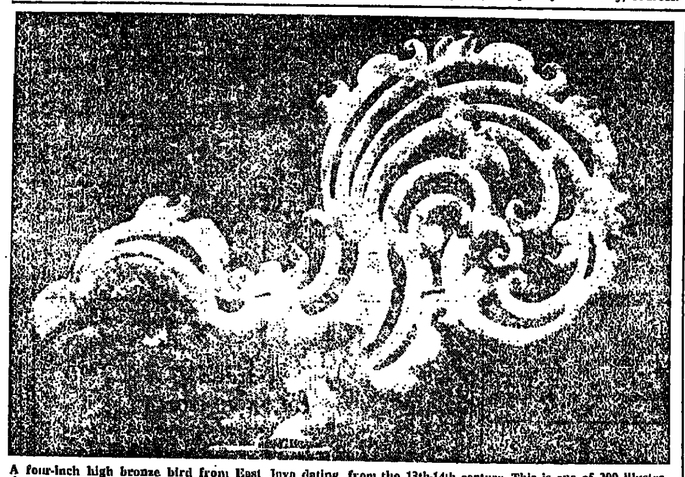
The historical deficiencies of Lecourt's account must be put in context. He is a philosopher, and the strength of his work undoubtedly lies in his analysis of dialectical materialism and its relationship, particularly in Stalin, with political policy. Given his philosophical approach, it is not surprising to find that the book is devoted to interpreting existing, frequently secondary, sources. Of course, many of the relevant documents are unavailable for study, but Lecourt has no pretensions of doing a piece of original historical research.

The text of *Proletarian Science?* falls into three distinct parts; Althusser's programmatic introduction, the account of Lysenkoism, and an appendix on Bogdanov and the theory of two sciences, proletarian and bourgeois. Lecourt's intention is to show how, *after* it was established as a set of successful agricultural techniques, Lysenkoism was reformulated as a political philosophy. To understand this move, some account of the theory of two sciences is essential, a theory for which Lecourt has undisguised contempt. Indeed, this is the least satisfactory aspect of his book for he fails to explain why specifically classical genetics was denounced as bourgeois while other sciences apparently were not. Lecourt goes into some detail to show why and how Lysenkoism was established. He sees this in terms of "the peasant question", the need for a new agricultural science to increase production and to match the radical reorganization into collective farms. Lecourt has therefore provided a valuable working model of the relationship between practice and theory in science.

Overall I would have wished for a more complete and detailed analysis. English readers, for example, will want to know about responses to Lysenko in Britain, Lecourt's material being exclusively French. The English-speaking world finds cult and in this case the translation does not help, being on occasion ploddingly literal.

Despite the fact that Lecourt's beliefs about science and about history are controversial and the people will find much to disagree with, this is a stimulating book. It deserves a wide audience while at the same time it should be read critically and not taken as a definitive statement of the relationship between science and ideology.

L. J. Jordanova



A four-inch high bronze bird from East Java dating from the 13th-14th century. This is one of 200 illustrations from The Sensuous Immortals by Dr P. Pal, a study of the arts of India and South-east Asia published by the MIT Press at £21.75.

The arms race optimists

Arms Control and Technological Innovation
edited by David Carlton and Carlo Schaerf
Croom Helm, £8.95
ISBN 0 85664 443 9

Papers presented at a summer school are even more likely than the products of any international symposium to be uneven in standard, inadequate in scope and lacking in cohesion. They are also liable to be out of date before they reach the reader. The biennial Italian International School on Disarmament and Research on Conflicts has learnt by experience. This volume arises from its sixth course which took place only in July 1976: the majority of the 20 papers included are authoritative and of good quality and they range over many facets of a complex subject.

The secret lies inevitably in the quality of the lecturers invited by the convenor of the school (Carlo Schaerf, now director of the Institute of Physics in the University of Rome), most of whom spent a full fortnight in the company of an interesting, if mixed bag of postgraduate and mature students. The central theme, which is surprisingly closely adhered to in the printed papers, was the pace of technological change in relation to the development of new weapons systems. Though the book does not quite live up to its promise to examine the capacity of political institutions (systems?) to adapt to the rapidly evolving circumstances, it does at several points tackle the inadequacy of prevailing arms control measures to do anything other than marginally modify the character of the arms race.

It is certainly refreshing to find Henry Scoville, Jr, a former deputy director of the CIA, and Michail Milstein, a retired general of the Russian Army, now a chief of section in the Soviet Academy of Sciences' Institute for the Study of the United States and Canada contributing to the same volume. General Milstein's statement on concepts relating to strategic arms limitations may be studded with Mr Brezhnev's official statements but it does engender some optimism about the possibility of military detente, particularly with its footnote reminder that the comments about American policy relate only to the former Republican administration and not necessarily to that of President Carter. His warning about the dangers of widening the "usability" of nuclear weapons might, however, have been tailored to respond to the subsequent news of the development of the so-called neutron bomb. Scoville's plan for what he terms reciprocal unilateral restraint is the more likely to prove of practical value in providing a basis for discussion of new initiatives in the run up to the special session on disarmament of the UN General Assembly to be held in May. That this should lead on to a world disarmament conference is the plea of William Epstein, for long director of the disarmament division of the UN secretariat.

The core of this book lies in its focus on "new technologies and new weapon systems" the subject of a keynote paper by Kosta Tsipis of the Centre for International Studies at MIT. He concentrates on computers in weapons systems as one application of the latest portentous developments in solid state physics. He shows how the invention of precision guided missiles (PGMs) has both reduced the expense of war and deepened the battlefield. This and related developments, including the cruise missile, he sees as promoting a further qualitative escalation of the arms race. So he expresses relief that there has been no breakthrough in anti-submarine warfare corresponding to the battlefield electronic counter-measures which he describes.

Several of the best contributions concentrate on nuclear proliferation but with the exception of David Carlton's essay on the Anglo-American nuclear relationship the blame for little progress in this field is left firmly with the nuclear weapon states. One writer actually ends by quoting approvingly what he terms reciprocal unilateral restraint is the more likely to prove Leonard Beaton's *Must the Bomb Spread?* published in 1966—a tribute both to that book and to the obstinacy of the problems it discussed. The new book indeed is generally neither destructively pessimistic nor starry-eyed—in this field an achievement in itself.

William Gutteridge

PARRY match

Artificial Intelligence and Natural Man
by Margaret Boden
Harvester Press, £13.50 and £4.95
ISBN 0 85527 435 and 700 9

There is only one university department of artificial intelligence (AI) in the United Kingdom: it is at Edinburgh, and its name is on one of their standard maroon plaques by the door, where passers-by give it the same wondering glances as they do those of opistemics, and of the man-made future, in the next street. At parties its practitioners have to explain patiently and regularly that their concerns are rampering, not with people, but with machines.

AI is, however, a perfectly serious subject: the recipient of enormous research funds in the United States; and even here it is at least represented in virtually every major department of computer science. It is not even a particularly new subject—though its failures and brash overstatements are frequently excused as though it were—for the dream of imitating or creating a reasonable facsimile of our own mental powers is at least as ancient as the alchemists and Pascal's engines. But, just as physics achieved intellectual lift-off, as one might put it, with the advent of celestial measuring instruments, so has AI with the arrival of the digital computer.

But, new or not, AI has had what media men would call an image problem: it has had key ideas poached by psychology and more recently linguistics; it has been attacked by philosophers as immoral and/or futile; it has been disowned by substantial elements in its mother-subject computer science but, nevertheless, has not been able definitively to formulate, to itself or to the man in the street, what at bottom it is about. Easy definitions like "the study of intelligent processes independently of their incorporation in a human or a computer" may seem to ease the problem for a moment, but not for long. Nor do mere surveys of the computer programs that have actually functioned—at such tasks as natural language dialogue, music composition, perception of objects, or control of robots—point to any coherent body of theory.

This book is probably the most serious attempt so far to remedy this defect. Dr Boden is by profession a philosopher and psychologist, but has digested and presented the details of even the most recent AI programs in such a way that many AI workers will want to read them here rather than in the standard research papers; rather as German students were said until recently to prefer to read Kant in English translation, which made him so much more lucid and reasonable!

But she has done far more than survey the field, in a clear and jargon-free way, by interrating the book with the aid of general ideas: some derived from the AI research itself—intelligence in understanding, creativity, adding a third dimension to vision, etc—while others are traditional categories that are, in effect, different ways of stating the problem that AI tackles. These constitute the final section under the headings "Psychological, Philosophical and Social Issues".

Indeed, the book is written as a seamless whole that will make it hard to set chunks as required reading for courses, since its parts are all mutually interdependent: but the intellectual gain will be far greater than any loss of pedagogical convenience. The author has achieved a goal which many strive for: a position that alienates neither the layman nor the expert, but which is none the less uniform, with no need to consign fuller discussion to a jungle of notes at the back.

However, not even Dr Boden's styles can disguise the fact that she found some topics in the field far less congenial than others. Again she has made definite and personal choices about the amount of space to be devoted to various celebrated programs. So, for example, she gives a very full discussion of Colby's PARRY program, which conducts written dialogues on a screen with anyone who will type to it, and is almost certainly the best "person simulation" yet designed, as measured by its ability to fool participants that they are talking to another person rather than to PARRY. In spite of this, many prominent figures in AI do not take PARRY seriously, because it has no "theory" of the sort they consider essential. Dr Boden has thus made a theoretical choice in the place she has given to PARRY, one which I consider well justified.

A feature of the book that will continue to command attention, perhaps even when the details of particular programs have lost their interest, is Dr Boden's thorough and cogent defence of the proposition that AI is in no sense *dehumanising*, let alone socially threatening, in the way that recent critics have claimed, but is, on the contrary, a genuine triumph of a humanistic culture. As she summarizes her argument (page 473): "[Artificial Intelligence] does this by showing, in a scientifically acceptable manner, how it is possible for psychological beings to be grounded in a material world and yet be properly distinguished from 'mere matter'." AI workers, AI critics, AI students, along with the merely curious, will all profit from this excellent book.

Yorick Wilks

The third edition of *Units, Symbols and Abbreviations: A Guide for Biological and Medical Editors and Authors* by D. N. Baron can be obtained from the Publications Department, Royal Society of Medicine, Chandos House, 2 Queen Anne Street, London W1M 0BR, price £2.00.

BOOKS

Slanging match . . . or debate?

Economics: An Anti-Text
edited by Francis Green and Petter Nore
Macmillan, £7.95 and £2.95
ISBN 0 333 21201 0 and 21202 9

Anti-Samuelson, vols 1 and 2
by Marc Linder in collaboration with Julius Sensat, jnr
Pluto Press, £6.70 and £3.00
ISBN 0 916354 14 8, 16 4, 15 6 and 71 2

Many students and teachers of economics express dissatisfaction with the subject; this is no new occurrence, there has always been a critical fringe in the profession, but are there signs now that the critical fringe is increasing and perhaps moving from the outside into the centre of the stage? Perhaps; I doubt, however, that there is a secular tendency for the rate of discontent to rise. I suspect it is a cyclical phenomenon.

The causes of the discontent are manifold; at the very basic level we all know that many students do find the subject difficult, especially when it comprises fair doses of mathematics and statistics. They also, of course, often find it dull and boring. Stiff in their teaching and research have similar problems. Genuine as this sort of problem is, it is not unique to economics; but there are more valid reasons for discontent and the urging of alternative programmes usually designated as radical. While some of these radical critiques are non-Marxist there can be no question that the main driving force now behind "radical economics" is Marxist analysis.

Until comparatively recently one of the major obstacles to bringing "radical economics" into the basic teaching of economics has been the dearth of satisfactory elementary expositions; there have been some attempts (for example, Hunt and Sherman or Robinson and Eatwell) and here are two more. While both are fairly orthodox Marxist they otherwise differ in approach, level and content. What is their main complaint about "orthodox", "bourgeois" economics? Ultimately, it comes down to "false consciousness"; as Lawrence Harris puts it (*Anti-Text*, page 130):

> In capitalist society, mistaken notions about the nature of that society and its economic activity are widespread. They are actually fostered by the mass media and the educational system, although the teachers, journalists and others who participate in the process are not dishonest—they, themselves, have wrong ideas.

The business of convincing the reader that Marxist ideas are right—and more generally the exposition of the Marxist theory of truth—are less happily illustrated, although Francis Green makes a gallant effort at such a defence in the opening chapter of *Anti-Text* ("The Myth of Objectivity in Positive Economics").

Anti-Text is explicitly not a text; rather it is a series of commentaries on the basic areas covered in a standard, elementary, economics course, and it follows the order of development usually followed in such courses. Thus, it begins with economic methods and assumptions, part one containing, besides Francis Green, papers by Sue Himmelweit on "The Individual as Basic Unit of Analysis" and Monika Bentel "Class in Contemporary Britain". In these papers and throughout the rest of the book the various authors are most careful to present the "bourgeois" case and, in my view, do so most scrupulously. It is clear that they have all had a good orthodox upbringing.

Part two (microeconomics) has papers by Simon Mohun on "Consumer Sovereignty", Sam Aaronovitch on "The Firm and Concentration" and Bettina Beren, "Wages and Labour". As with the general tenor of this volume the central message of the papers by Mohun and Beren is that "bourgeois" economics is "ideology masquerading as positive economics".

Part three (macroeconomics) I found disappointing. Ben Fine in his chapter "The Concept and Origin of Profit" outlines the "orthodox" concepts of profit without any reference to Knightian uncertainty or Schumpeterian innovations. Lawrence Harris argues (asserts?) that "the balance of payments cannot be seen as a constraint on economic activity, or balance as an objective of policy", hence we have to explain governmental policies with respect to the balance represented in the (world-wide) interests of the capitalist class. The chapters on underdevelopment (Rhys Jenkins) and inflation (Andrew Glyn) are really far too short and cryptic to give much flavour of the positive side of a Marxist approach to these topics.

Part four (Economic Theory and the State) is, of course, an area where there is much controversy and disagreement within Marxist circles. Bob Sutcliffe—"Keynesianism and the Stability of Capitalist Economies"—questions the ability of Keynesian measures to stabilize capitalist economies (as do many "orthodox" economists). Peter Nore in his chapter "Economic Theory and the State" argues that orthodox theory cannot produce a "satisfactory way of understanding state interventions" because "one of neoclassical theory's ideological functions is to show that the market economy is the most efficient allocator of resources", hence a theory of the (interventionist) state is ruled out.

All in all *Anti-Text* is a useful addition to the alternative (Marxist) literature. It is rather uneven in level of treatment and more severe editing would have avoided the continual reiteration of simple Marxist notions.

Anti-Samuelson is a much more substantial enterprise. The two-volume English edition is an abridged account of the four volume *Der Anti-Samuelson* which in it's turn was translated from a manuscript which came out of the author's efforts to produce a critical account of bourgeois economics for students at Princeton in the early 1970s.

In this sense it is a reaction, as the preface puts it, to "the rise and decline of the American student movement of the 1960s and 1970s. One of it's chief failings, and one shared with the New Left in general, was a tendency to substitute moralizing for theoretically grounded politics." What is attempted here is to show that Marxism "alone is capable of understanding contemporary capitalism" and why "bourgeois economics cannot".

The method used is to go literally through Samuelson chapter by chapter and provide a running commentary on Samuelson's text. The publishers' blurb suggests it as a general anti-text, they see it also as "an anti-Lipsey," for example. Certainly these extended commentaries include excursions into material well outside and beyond the scope of Samuelson's elementary textbook. In particular, Linder digresses into the history of economic doctrines—an approach which has returned to favour in the presentation of introductory courses, especially where they explicitly wish to incorporate a radical ("Marxist") thrust. Linder also incorporates what, in my view, is a less fortunate aspect of Marxism. This is what may be termed "attack by abuse"; thus we read of Samuelson's "incredibly sloppy scholarly method", his "shoddy science", his inclusion in later editions of his book of such topics as pollution and race discrimination as, "essentially a commercial response". But perhaps I have "substituted moralizing" here.

Volume one has two sections; "Basic Ideological Concepts" and "Crises and Keynesianism". The first section is, naturally, the key to the whole work because it is here that Linder states the fundamental Marxist objections to "bourgeois economics". There are, vis-à-vis Samuelson, secondary ones about his use of evidence and his own scientific integrity but the main strand (as in *Anti-Text*) is on the failure of orthodoxy to perceive the "fundamental" nature of capitalism and hence its laws of development. Whether the average reader will be convinced that he is being shown an improved scientific method rather than yet more ideology is an open question.

Section two will perhaps be of most interest to students not well-versed in Marxist economics. Here we have a critique of Keynesianism—with good historical material—from the orthodox Marxist standpoint.

Volume two has four sections (although there appears to be some confusion between the table of contents for volume two as shown at the beginning of volume one and the contents as shown in volume two), on money and credit; value and price theory; factors of production and the world market. The section on money and credit (chapters 10, 11 and 12) does reflect the relative backwardness of Marxist analysis in the areas of money, credit and inflation but this is an area where little work has been done from a Marxist standpoint until very recently. The next two sections deal with what "bourgeois" economists would regard as the central core of microanalysis. The last section, on Imperialism and the world market presents comments on these sections on Samuelson that include international trade, international monetary problems and economic development.

Can Marc Linder's book be used profitably alongside the standard "bourgeois" texts (or indeed in lieu of them); or more generally, can differing ideologies—if such be the true nature of different brands of economics — exist sensibly in a teaching programme? Yes they can, provided that ground rules for the resolution of disagreements are fairly clear and agreed to. Slanging matches are clearly not a substitute.

B. A. Corry

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Some bold perspectives

Smith, Marx and After: Ten Essays in the Development of Economic Thought
by Ronald L. Meek
Chapman & Hall, £8.00
ISBN 0 412 14360 7

It is a tribute to the unity and originality of Professor Meek's scholarship that all 10 essays in this collection—of which eight have been published previously—fit together well. When read consecutively, they provide perspectives which cannot be derived from each individually.

Two on Smith are distinguished by exact textual scholarship; an analysis (first published jointly with Andrew Skinner) of Smith's views on the division of labour leads to a revision of W. R. Scott's dating of Smith manuscripts; and the examination and reproduction of John Anderson's *Commonplace Book* indicates the content of Smith's lectures in the early 1750s. The *Commonplace Book* shows signs of Smith's theory of development by stages, though only in embryonic form, and so can be set beside the other essay on Smith, of greatest interest to the general reader: the well-known study of Smith, Turgot and the fully-fledged "four-stages" theory, in revising which Professor Meek emphasizes the contribution of Montesquieu.

The three essays on Marx are even more integrated. The first examines Marx's method of transforming values into prices and takes account of more recent discussion of Marx's whole procedure. This guide for the "plain person" is virtually new and a model of clarity of exposition. Two others complement the central essay: one suggests that Marx, given his perspective of the exploitative nature of capitalism, could not avoid setting himself the difficult transformation problem of having to derive prices from values; the other defends the view that Marx's analysis of value and price had an historical dimension, even though he may not have followed a general "logical-historical" method.

The last three essays—on "After"—do not degenerate, as they could so easily have done, into an incoherent hotch-potch; instead, they provide a clue to a characteristic of the whole. In the penultimate essay Meek declares an objective: "to cut through the religion and the mathematics and go back to fundamentals". He does so successfully. The collection is conspicuously free of the partisan verbiage frequently exchanged between those who navigate these muddy waters. Contributions from and to many quarters are skilfully revealed and reasonably accepted.

In the previously unpublished key-setting essay on Smith and Marx which opens the book, Smith is interpreted as the fertile source of both the tradition which Ricardo and Marx established of rooting the theory of value in the conditions of production and of the tradition which starts from the conditions of exchange. In the penultimate essay marginalism, based on the general principle of economic rationality, alone offers a satisfactory economics of control.

Yet the last essay of all, Meek's inaugural lecture, leaves an uneasy feeling that the concession to the techniques based on the economic rationality of the marginalists may go too far. Were his expectations of the ability to control the "economic machine" in the autumn of 1964 over-optimistic? Did they escape from that historical basis of economic theory rightly commended in Smith and Marx? For all the advantages of the new techniques they are often abstractions, and abstractions are dangerous. Perhaps such doubts reflect the nature of Meek's writings, which, like all good scholarship, answers many questions and raises more.

R. H. Campbell

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BOOKS

Monopoly fever

Concentration in Modern Industry
by L. Hannah and J. Kay
Macmillan, £10.00
ISBN 0 333 19082 4

Until relatively recently industrial economics in the United Kingdom was a somewhat neglected area of study, much academic talent having been directed to the study of macroeconomics though arguably not with commensurate effect. This book is one more sign of a growing emphasis on the importance of industrial studies.

The focus of the book is the growth of concentration in British industry, a topic popular with students of industrial economics and undoubtedly one of the more exciting areas of the subject. At the beginning of this century the 100 largest firms in British manufacturing industry controlled about 15 per cent of its net output. Today the figure approaches 50 per cent. Where, it may be asked, will it end? This process of increasing concentration has been more or less continuous, in marked contrast to the United States where in recent years the anti-trust laws have dealt severely with mergers. This book is mainly concerned with finding out why the concentration process has occurred although the authors also deal with its effects and how it might be controlled.

In explaining the onward march of concentration some economists (notably Hart and Prais) have emphasized the importance of a statistical tendency which is referred to as the Gibrat Effect. Avoiding technicalities the effect really amounts to this: Suppose we start with a population of equal sized firms. Assume that around a given average growth prospect for that population as a whole there will be a dispersion of rates of growth which each of the firms has at all points of time an equal chance of enjoying. Odd though it may seem the firms will not long remain equal in size—chance or luck will see to that—and indeed over time a pattern resembling that of the modern concentrated industrial structure will emerge. The authors, concentrating particularly on the period since 1957, maintain that although the Gibrat Effect had a significant influence they reject it as a principal cause of the increase of concentration. Other studies (notably by Utton) have suggested that mergers have been a major cause. One study has suggested that roughly half the increase in concentration in United Kingdom manufacturing between 1954 and 1964 was due to acquisitions. Hannah and Kay support this emphasis on mergers but find that the above proportion understates their role—their finding (for a partly overlapping period) points to the conclusion that overwhelmingly the growth of concentration was due to mergers.

The authors give some consideration to the implications of increased concentration. Traditionally this has been viewed as transforming competitive into oligopolistic or even monopolistic structures. Either way the resulting market power has been associated with increased profitability. This is well supported by empirical research although it should be noted that, certain interpretational difficulties apart, the relationship is not a strong one and some studies suggest that it is not continuous. From a welfare point of view the effects of high concentration have mainly been seen as causing a misallocation of resources in production and a redistribution of income (away from consumers into the pockets of those with the market power), although the possibility that large size (high concentration) might be necessary if scale economies were to be reaped has always been a complicating factor.

The authors feel, in my view rightly, that this kind of analysis has tended to be too narrow—they draw attention to the relatively neglected social and political implications of high concentration, in particular they note the tendency for large organizations to create alienation among workers and a bureaucratization to move us in the direction of the corporate state. However in respect of the latter they feel that the main problem is not the subversion of government by business but the subversion of business by government which manifests itself in disastrous industrial interventions.

Given that mergers are the main cause of increased concentration, and noting the ineffective record of United Kingdom merger policy (between 1965 and mid 1973 the mergers panel examined 85 mergers involving the transfer of £18,000m of assets and of these referred only 20 (2.5 per cent) to the Monopolies Commission of which seven were abandoned voluntarily and six were forbidden), the authors consider whether the policy should be modified and not surprisingly conclude that a tightening up is called for. I was a little disappointed with this aspect of the book. Admittedly it is not the central concern but some more detailed suggestions would have been welcome. It seems to me that the choice lies between the United States approach of prohibiting all mergers where a substantial lessening of competition is involved and requiring those involved in mergers to demonstrate some net benefit to society rather than merely that they are not against the public interest.

This is an excellent book. Although it is not bedside reading the authors have done much to enliven it and to make this kind of analysis more relevant than hitherto. The main contribution of the book lies in its analysis of the causes of increased concentration in the United Kingdom and this will be of considerable interest to industrial economists, policy makers and indeed all who are concerned about the evolution of our economic, social and political system.

Dennis Swann

Are you being served?

Price Theory
by W. J. L. Ryan, revised by D. W. Pearce
Macmillan, £12.00 and £4.95
ISBN 0 333 17912 9 and 17913 7

Pricing—Principles and Practices
by André Gabor
Heinemann Educational, £9.25
ISBN 0 435 84365 6

These two books provide an interesting contrast of view and approach to price theory. W. J. L. Ryan's successful introductory textbook, revised by D. W. Pearce, is aimed primarily at undergraduates. André Gabor's book, which is addressed mainly to business and academic circles, is principally concerned with the problem of setting prices to achieve a variety of business goals under the practical business conditions from which economic theory often abstracts.

In an area where textbooks on price theory and modern treatments of microeconomic theory abound, it would be hard for a new textbook to survive into reprints and revised editions unless it were distinctive in its treatment of material or it identified an area of teaching need that had been overlooked by others. The merit of Ryan's textbook is that to a large degree it has both these features. The scope is comprehensive, the exposition is lucid and painstaking, and mathematical manipulations are largely dispensed with so that the undergraduate may assimilate unfamiliar ideas without tears. Care is taken to explain the jargon of the subject, pointing out where necessary the alternative terminologies in use for identical concepts, which can often be a source of confusion to the student.

The authors are not afraid to step over the bounds between micro and macro modes of argument, for example, in the chapter on savings, in order to clarify concepts which greatly aid the understanding of price theory but lie outside the traditional bounds of microeconomics. An interesting feature is the inclusion of a chapter on the normative uses of price theory, a step not often taken in introductory textbooks. The extension is, I think, successful for the treatment leads on naturally from the first two chapters. The textbook will fill a real teaching need both in its scope and its exposition.

From the simple observations that businesses must operate in conditions of uncertainty and limited information and that firms are productive organizations with long-term policy objectives, Gabor points out that "apart from the here-today-gone-tomorrow kind of adventurer, no sensible businessman would knowingly endanger the long-run profitability of his firm in favour of some temporary gain. The future being inevitably uncertain, this means that pricing policy should strongly be influenced by the regard for prestige and the desired image of the firm. Exploiting any momentary situation would mean increasing the price whenever demand is keen and lowering price when demand slackens". Yet it is surprising how many economists continue to believe that businessmen act as though they were merciant adventurers.

There is much in this book that will be of interest and of use to economists as well as to the businessmen who have to take pricing decisions. The pricing problems of industrial and consumer goods are discussed, as well as the pricing of services, price discrimination, and the pricing of public utilities. Various cost-based pricing policies are explained, with their limitations.

The author's principal theme is that pricing is not, or should not be, a passive policy of applying a customary mark-up to some appropriate measure of unit cost, but should be customer-oriented. This requires that firms should be prepared (and would find it worthwhile) to do market research to estimate what price customers are willing to pay for the product. A disquieting piece of consumer research reported by the author is the apparently widespread consumer practice of judging quality by price, that is, a high price (say, relative to a standard non-branded good) is interpreted by customers as an indicator of high quality.

Gabor explicitly recommends that profit conscious firms take advantage of this consumer phenomenon, whether or not the high price genuinely reflects high quality of product, and describes the market research techniques available to help find the most advantageous price.

Many of his examples indicate that firms which initially had set a relatively low price sold more after raising the price, because customers were presumably suspicious of the product's quality or were indulging in Veblen's "conspicuous consumption". The existence of this phenomenon gives firms who exploit it by careful market research considerable market power in otherwise competitive markets. This consumer would feel happier were there stronger efforts to encourage a countervailing power through bodies such as the Consumers' Association, which inform us of the best buys for given quality, leaving those who wish to practise conspicuous consumption free to buy goods at high prices.

K. J. Coutts

BOOKS

Statistics of war

The European Economy 1914-1970
by Derek H. Aldcroft
Croom Helm, £6.95 and £2.95
ISBN 0 85664 380 7 and 379 3

One cannot help admiring Professor Aldcroft's astonishing industry. No sooner has one book appeared dealing with Europe in the 20th than here we have another covering the vicissitudes of the European economy since the First World War. The present work, like its predecessor, is not the product of original research. All the same it is based on a comprehensive range of source material in English, reasonably brief and sensibly devoid of footnotes.

But is it any more than just another routine addition to the textbook market? It certainly does not sparkle with brilliant and original insight in the way that Professor Postan's little book on post-1945 Europe does. The style is anything but elegant too, spattered as the book is by slang and clichés such as "the going getting sticky", "Europe in a shambles", "speculative ramps", "set-ups"; particularly hilarious is the assertion that 3.3 per cent of the German population was "decapitated" through military action during the First World War.

More unfortunate in an analytical work is a tendency to use words loosely. Sometimes it is just a careless adjective—"savage" retrenchment policies or "lax" monetary policies. Elsewhere it is more serious. Aldcroft says, for example, that during the 1950s and 1960s it would have been "better" had the authorities in Britain concentrated on just one or two policy objectives. But what is "better"? One suspects Aldcroft would have had them opt for growth but the choice of objectives, the decision about what was best for the nation as a whole in the short as well as the long run, was the crux of the problem.

His revisionist aspirations are not all that happy either. In one paragraph he says that Marshall Aid was impressive and in the next that its importance can easily be exaggerated. And what does this mean? "One should not totally overestimate the impact that cheap money had on residential construction . . . though generally the favourable influence tends to be exaggerated." Perhaps Aldcroft's difficulty is hitting upon the phrase that reaches to the heart of the matter.

It is all very well to analyse solemnly various figures of war losses—though it is alarming to be told that the death in action of 15 per cent of those mobilized, equivalent to 8 per cent of all Europe's male workers in 1914, was a loss "quite small in relative terms"—but for the whole horror of the Second World War one has to turn to Alan Milward's simple words: "People died and were killed in huge numbers in anonymous and terrifying circumstances." The numbers then follow too but the perspective has been truly set. Aldcroft unfortunately cannot use words that way or see his period so starkly.

It is an uneventional book. Individuals play little part and though there may be something to be said for this in the complex world of largely faceless public servants after 1945, it is hardly a way to represent the twenties and thirties. Students will undoubtedly find the book a useful tool as it goes steadily through the literature and picture the reader through some testing analytical problems effectively enough. Aldcroft has great knowledge and much understanding of twentieth-century economics. It only he would write less and with more care and with more heart, he could produce a work of real importance.

S. B. Saul

A price on our heads

The Valuation of Human Life
by Gavin H. Mooney
Macmillan, £5.95
ISBN 0 333 21422 6

The objective of this book is to examine how human life can be valued within the framework of cost-benefit analysis. Mr Mooney establishes at the outset that, for a public investment project in which the saving of lives is a significant expected benefit (such as in a scheme to reduce road accidents), it is important to try to place a monetary value upon the lives that may be saved rather than to consider them only as "intangibles". Without some method of valuing life it is extremely difficult to compare projects of this kind, especially in fields such as health care and road safety, with one another or with other kinds of public investment.

The author addresses himself to a wide readership, from economists and public administrators to interested non-specialists. His approach is to review the methods of valuing life that economists have put forward, both in theoretical terms and in terms of empirical case studies. His main theme reflects the widely accepted theoretical basis of cost-benefit analysis. Briefly this basis is that an expected positive aggregate economic surplus (consumers' surplus plus economic rent), in present value terms, is a necessary condition for a project to be potentially acceptable. Thus in theory the individual, either as consumer or as factor of production, is sovereign because the overall net social benefit is found by aggregating the benefits and costs as they are valued by individuals.

Mr Mooney rightly concludes that two of the suggested methods of valuing life do not fit this framework. By one of those (the human capital method), for example, an individual's life is valued by estimating the difference between his future "returns" (including his money income) and his future "costs" to the community. But this cannot be his own valuation because he would not agree with it if he knew *he* was to die. The problem is that lives must be valued without knowing whose lives may be lost. The theoretically appropriate measure, which meets this problem, is the individual's valuation of a given reduction in the risk of death. Allowing for externalities, we should also include the sum of other people's valuations of the reduction in that individual's risk.

The author admits that this method presents major problems. Following the idealized decision rule that he puts forward for the use of this life valuation in project analysis, the measurement of the physical level of risk is to be made objectively (by the public authority) while the valuation of any given reduction in risk is to be made by the individual. Thus, for example, individuals might be asked to value an expected 10 per cent reduction in the risk of death by road accidents resulting from proposed motorway crash barriers. Such a method, while consistent with theory, would seem to be unworkable.

Indeed cost-benefit analyses do not normally use the aggregation of individual valuations of costs and benefits because it is in practice impossible to do so. Instead they rely on estimates of total net benefits which approximate to the aggregates of economic surplus. Therefore it will probably be most fruitful to look for reasonable approximations to the aggregate of individual valuations of a reduction in the risk of death.

Mr Mooney is less convincing in his argument that an individual's reduced risk of death can be split into two components, the risk associated solely with death and the risk relating to the fear or anxiety associated with death, although he puts this forward only as an analytical distinction. He suggests a parallel between these two types of risk and the "value in use" (i.e. normal demand value) of a good if it is purchased and its "value in anticipation" (i.e. the value an individual may get either by knowing the good is available for possible future purchase or by the fact that it increases his choice of goods) respectively. He goes on to propose that this distinction might provide a way of allowing for possible extra costs of anxiety. It is hard to see how it holds analytically but its practical use would seem to be very small. Nevertheless the book is a useful summary of the state of work in this field for the general reader.

A. R. Platts

An indigestible feast

Macroeconomics: Theory, Evidence and Policy
by A. J. Westaway and T. C. Weyman-Jones
Longman, £7.95 and £4.95
ISBN 0 582 44666 X and 44665 3

A successful new book in this highly competitive field must have something special to offer—a new approach, perhaps or exceptional clarity or breadth of coverage, or an unusually extensive coverage of recent developments. The authors have attempted something of each of these in their textbook designed for second and final-year undergraduates, but, perhaps because of lack of space, have not altogether succeeded.

The attempts to cover the whole field of macroeconomic theory and policy and to include a reasonable amount of empirical evidence have entailed a degree of concision which often involves rather mechanical algebraic manipulation with insufficient supplementary explanation.

To take a few random examples: the attempt to deal with growth theory in only 15 pages means that the algebra of the simple neoclassical model is worked through, and it is then said that at too low a capital-labour ratio when savings exceed desired investment "this excess accumulation of capital means that the capital-labour ratio increases" (page 286). But there is no attempt to explain how or why this SI relationship differs from the Keynesian one. On page 149 "Leijonhufvud claims that it is a communications failure that prevents the system from adjusting from the Keynesian unemployment state" but this is not explained, and Clower's (surely relevant) analysis of income-constraints is not mentioned.

Again (though this is a common lacuna) "the method of finding a solution to [a second-order difference equation] is a technicality which need not concern us here" but there is no attempt to explain informally how the relative sizes of the parameters of the equation (and their economic meanings) affect the propensity to generate cycles.

Examples like these could be multiplied. Taken individually, they may seem unimportant and the criticism pedantic. Together, however, they leave the reader aware of having covered a great deal of ground but of having touched it with his economic toes only spasmodically. This is a pity, for there are many points at which good attempts are made to provide concise accounts of relatively "advanced" topics—for example, in discussing portfolio diversification, Tobin's rationale of individuals' diversification is presented, not just the usual appeal to differing expectations at the aggregate level. And later in the same chapter, there is a welcome—but again all too brief—attempt to describe the identification problem in the context of money supply and demand functions.

A similar perfunctoriness characterizes the authors' use of empirical evidence: occasional regression results are quoted in some chapters (consumption, investment, demand for money), but there is no systematic deployment of quantitative results and the five-page introduction to macroeconometric models is woefully inadequate.

In short, despite their obvious good intentions, the authors have bitten off more than can possibly be chewed and digested in just over 300 pages.

M. J. C. Surrey

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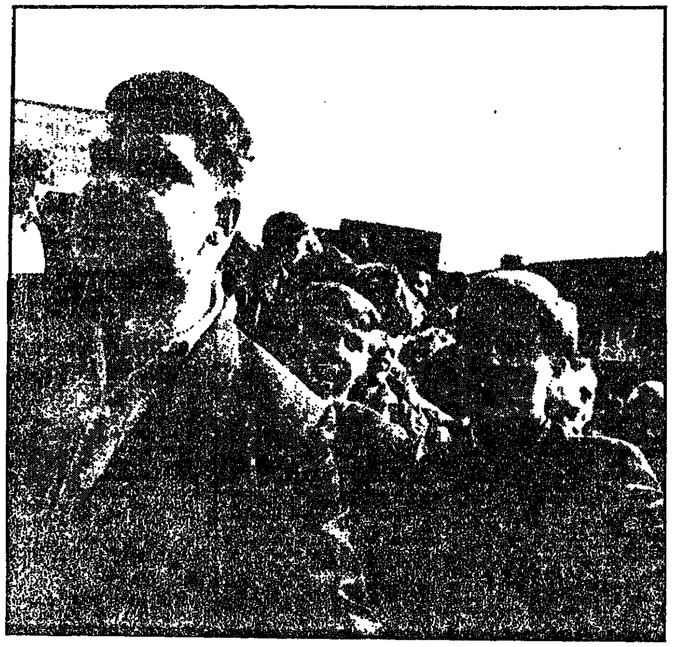
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BOOKS

Family that kept one step ahead

The Glassmakers: Pilkington 1826-1976
by T. C. Barker
Weidenfeld & Nicolson, £10.00
ISBN 0 297 76909 X



The face of confrontation—defiant glassworkers still on strike during the long Pilkington's dispute in 1970 hurl abuse at men returning to work at the company's St Helen's plant.

The subtitle of this book is misleading, for the period covered in detail is, in fact, 1826-1939. The last 37 years are covered in a relatively brief epilogue of 19 pages—"because we are dealing with events involving people who are still alive".

This is a pity because the postwar history of Pilkington is especially interesting to those not wanting to know of Pilkington per se, but of the operations of a successful innovator and of a large multinational firm. In 1939 Pilkington was not large in a multinational sense although it did dominate British glassmaking. In the postwar period it developed the float glass process, a major technological change, went public in 1970, and experienced a long and widespread strike (its first since the 1870s) in the same year.

From the bulk of the book three impressions of Pilkington's operations emerge strongly: continual innovation; the degree of cooperation with rivals; and the way in which the family was able to keep control of the company. As we shall see, the first two of these impressions are closely interrelated.

In the early days it was salesmanship and "constant vigilance in the office and factory" which was the cause of its success, but from 1860 onwards it was its ability to keep abreast of technical developments that was of overriding importance. As a framework to discuss innovation and its diffusion, Rogers has suggested that the firms which adopt innovations could be divided into innovators (the first 2.5 per cent of all ultimate users), early adopters (13.5 per cent), the early majority, the late majority, and laggards. Pilkington seem to fall firmly in the early adopter group—those who evaluate innovations quickly and then adopt them if they seem profitable. They were very rarely first in the field but were very quick to move in once a profit potential became apparent.

There are two aspects to this. First the company has to be aware immediately of scientific and technical developments and to see their applicability. In the early 1860s Windle Pilkington had this ability: "he did not possess an original or imaginative mind of the sort which produces major new inventions; but he was quick to spot potentially valuable improvements made by others . . .".

In the inter-war period Pilkington was relatively slow to establish its own research and development department but had a highly organized process for screening and disseminating information. This information often emanated from overseas and the company was always quick to obtain United Kingdom licence rights on inventions, for example, its agreement with the American Window Glass company over the float-drawn process in 1909.

The second aspect of being a successful innovator is to back the developments with funds. The board always seemed willing to spend large sums of money on improvements which seemed "at all promising".

Closely connected with Pilkington's record of innovation were their continual agreements with other glass manufacturers on technical matters, market sharing, and price fixing. Many of these agreements were with 10 glass manufacturers in Europe who in 1904 formed the convention to control output on the continent. This was a powerful cartel and lasted through the difficult trading conditions of the inter-war period—although Pilkington escaped the full brunt of the depression as two of its important markets, house building and cars, were little affected. After protracted negotiation quotas were set, markets geographically divided and the rights to the use of technical improvements were exchanged. As a cartel the convention seemed more durable than most.

Through all of this the family retained total control of the company. The original interest was an eleventh share of the St Helen's Crown Glass Company in 1826; three years later all 11 shares were in the hands of the Pilkington family. Successive generations of Pilkington were able to breed or admit by marriage enough able men—for clearly the business was successful—for the company to be the largest private one in Britain by 1970. The divorce of ownership from control—typical of public companies—also occurred in Pilkington, with the family managers receiving relatively little financial benefit compared with outside "family" shareholders. None the less both ownership and control rested with the Pilkington family.

The account Professor Barker provides is very detailed, perhaps excessively so. There are 1,455 footnote references and a further 60 pages of appendices. The main body of the text also contains the minutest detail—from how many cricket teams the company ran in the 1890s to the name of the Detroit hotel in which a company negotiator stayed during negotiations with Ford in 1923—and as a result it is not always easy to identify broader underlying developments. Thus the book should be extremely useful for research purposes but may prove too detailed for those with more general interests in the area.

W. K. Norris

Back to the land

An Approach to Land Values
by D. M. Turner
Geographical Publications, £6.2[illegible]
ISBN 0 900394 17 X

Land valuation is an aspect of [illegible] might be termed "practical [illegible] development economics", [illegible] occupies a curious place in [illegible] demic studies. It is studie[illegible] mainly for the examinations of [illegible] Royal Institution of Chartered [illegible] veyors—in almost complete [illegible] tion from university economics. [illegible] has impoverished both subjects.

Questions of urban develop[illegible] valuation for compulsory purch[illegible] the taxation of development [illegible] and more generally, the streng[illegible] and weaknesses of the price mec[illegible]ism in urban resource allocation[illegible] of great importance. But they [illegible] received little attention from [illegible] omists, whose occasional comm[illegible]tions have often suffered from [illegible] innocence of practical knowled[illegible] On the other hand, "estate mana[illegible]ment" has for too long been [illegible] technical, inbred subject divor[illegible] from the main stream of econom[illegible]

Other consequences have b[illegible] more serious. A contribut[illegible] factor in the (as events h[illegible] proved) ill-considered sequence [illegible] post-war British land legislation [illegible] been the inability of chartered [illegible] veyors to explain the issues in [illegible] way that could be understood [illegible] non-specialists.

This unfortunate division [illegible] prevails to a large extent in ot[illegible] countries. But in the United St[illegible] two practising valuers—Rich[illegible]lfurd and Homer Hoyt—have p[illegible]duced some of the most illumina[illegible] studies of urban growth. Dr Tun[illegible] of the department of land econ[illegible] at Cambridge, tries to integ[illegible] "estate management" and ec[illegible]mics in this book.

His book is intended to meet[illegible] need for a readable, more gen[illegible] and comprehensive survey of [illegible] value theory. According [illegible] the blurb: "He relates [illegible] values to the broader field of l[illegible] economy; and correlates the ph[illegible]cal, economic and institutional [illegible] fluences operating on the [illegible] ownership and development of l[illegible] with the valuation methods used [illegible] commercial transactions and [illegible] assessments for statutory and ot[illegible] purposes. . . . It will be useful[illegible] only to those professionally involv[illegible] with land values, but also to stud[illegible] of economics, geography, envir[illegible]mental and regional studies, [illegible] town and country planning; and [illegible] the bewildered taxpayer seeking [illegible] way through the maze of taxes [illegible] land."

The layout follows broadly t[illegible] of the professional valuation [illegible] books, with a brief review of "[illegible] nature of value" followed by [illegible] description of the main interes[illegible] in land, methods of valuation, [illegible] various sectors of the prop[illegible] market, and a discussion of t[illegible] bases of valuation laid down f[illegible] various purposes in British legis[illegible]tion. It ends abruptly after a [illegible] explanation of a second mortga[illegible] Various worked examples are gi[illegible]

The author's attempt is commend[illegible]able and, as a textbook of valuat[illegible] it is certainly broader in sc[illegible] and better written than the st[illegible]dard textbooks. On the other [illegible] hand, it is doubtful how useful i[illegible] will be to students of urban econo[illegible] mics, urban geography and allie[illegible] subjects.

There are many issues concern[illegible]ing land prices which have been the subject of violent controversy since the war and, in fact, since J. S. Mill pronounced in 1848 that "land owners make money, as it were, in their sleep". It should be possible to use the body of "estate manage[illegible]ment" knowledge to illuminate those issues, and to subject legislation to critical scrutiny. The discussion here concentrates on what this or that Act lays down, with little in the way of economic assessment.

But, whatever its limitations for the wider purposes it sets itself, this book is a competent summary of valuation procedures in British legislation. It can be recommended without qualification as supplementary reading for students taking the RICS examinations.

Graham Hallett

Reviewers

R. H. Campbell is professor of history at the University of Stirling;

B. A. Corry is professor of economics at Queen Mary College, London, and author of Money, Savings and Investment in English Economics;

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W. F. Gutteridge is director of complementary studies at the University of Aston. His books include The Military in African Politics;

Dr Rhodri Jeffreys-Jones is in the department of history at Edinburgh University. His book, Violence and Reform in American History, will be published later this year;

Dr L. J. Jordanova is visiting scholar in the department of history, University of Michigan;

Arnold McMillin is Bowes professor of Russian at Liverpool University.

S. B. Saul is professor of economic history at Edinburgh University;

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(b) Industrial design related to new building products and component development;
(c) Construction technology and design integration.
Council would hope to appoint someone who would wish to participate in the building up of the new School of Architecture, and who would take an active part in developing a significant contribution to the university and to the work of the professions in the building industry. The post is seen predominantly as a teaching position. The appointee is expected to join the present head of department, Professor Gerd Block, in the administration and leadership of the School. The position is available from early 1979.
The School of Architecture commenced teaching in 1975 and offers post-intermediate year courses within a two-tier degree structure and postgraduate studies by thesis. The School is a technical science faculty which offers a wide-ranging fully integrated professional course programme and on going research activities notably in the energy field. Present academic staff number 14 with 3 more to be appointed for 1979 plus eight support staff. Extensive laboratory, computer, library and audio-visual facilities are available. The first students graduate at the end of 1978 and the School will seek CAA/RIBA recognition in 1979.
CLOSING DATE: 31 March, 1978.

LECTURERS (2 Posts):
Two Lectureships in the newly established School of Architecture (1975) for the 1979 teaching programme.
POSITION NO. 603: **ARCHITECT OR BUILDING GRADUATE.**
To teach in the area of construction technology and building services integration within the context of building design and building performance.
POSITION NO. 604: **ARCHITECTURAL AERODYNAMICIST.**
An architect, engineer or physicist with an aerodynamics or fluid dynamics background to take charge of the development of the School's wind tunnel facility, and to teach in environmental aerodynamics and building services. The positions are available from December, 1978.
Appointees are expected to have some professional and academic experience, preferably a higher degree, or be willing to work towards obtaining a higher degree. The successful applicant will be expected to participate in the work of the School in general, to coordinate part-time specialist lecturers, to assume responsibility for the development and teaching of subjects in the B.B.Sc. and B.Arch courses. Information on the School is available from its Head, Professor Gerd Block. In the University.
CLOSING DATE: 31 March, 1978.

Department of Classics
LECTURER (1 Post):
One Lectureship in Classics available from 1st July, 1978. Preference will be given to applicants with good qualifications in both Latin and Greek and with a special interest in the teaching of Greek and Roman history. The appointee will be required to teach ancient history courses at all levels up to Honours. The Department of Classics offers courses in Greek and Latin literature and language up to Honours level and, as a new departure, civilisation courses to the third year level. Prospectus available from its Acting Chairman, Dr. A. Scobie, in the University.
CLOSING DATE: 28 February, 1978.

Department of Sociology and Social Work
LECTURERS (2 Posts):
Two Lectureships, one available for 1978 and the other from 1st February, 1979, to sociologists with a major interest in:
(a) **MODERN SOCIAL THEORY**
or
(b) **RESEARCH METHODOLOGY AND SOCIAL RESEARCH TECHNIQUES**
Applicants with interests in any of the major fields of sociology will be considered, but fields in which the Department is particularly interested include industrial sociology, sociology of the family and deviance. Applicants are asked to indicate their particular field(s). Sociology is taught as a majoring subject for B.A. degree in which there is a distinct social science orientation. The Department also offers B.A. Honours, M.A. and Ph.D. programmes. Enquiries on the nature of the position to Professor M. Hill, Chair of the Department, in the University.
CLOSING DATE: 28 February, 1978.

POST-DOCTORAL FELLOWSHIPS:
Post-doctoral Fellowships tenable in the following departments: CHEMISTRY, ECONOMICS, EDUCATION (EDUCATIONAL PSYCHOLOGY), PHYSICS, SOCIOLOGY AND SOCIAL WORK.
Tenure will be for one year in the first instance, but may be extended to a second year. The main purpose of the awards is to contribute to research programmes in the university. Appointees will also be expected to participate in limited teaching activities as agreed with the departmental head. Interested scholars should correspond in the first instance with the appropriate head of department, in the University.
CLOSING DATE: 16 March, 1978.
SALARIES: The salary scale for Professors is NZ$20,804 to $26,481; and for Lecturers NZ$10,585 to $12,069 p.a. (with lares paid to New Zealand) and for Post-doctoral Fellows, NZ$11,962 p.a. including cost of living and other allowances.
An amount of up to NZ$1,500 will be made available for travelling expenses for Post-doctoral Fellows, plus lares paid to and from New Zealand.
CONDITIONS OF APPOINTMENT: Prospective applicants should obtain conditions of appointment and method of application from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

The University of Calgary

FACULTY OF SOCIAL WELFARE

The University of Calgary

The University has a registration of about 12,000 students and a total faculty in excess of 900. The Faculty of Social Welfare has about 300 full-time, 120 part-time and 40 graduate students with a full-time faculty equivalent in excess of 30 positions.

Included is the Edmonton programme of about 90 full-time and 50 part-time students and five faculty.

Applications are invited for three positions at the rank of Assistant and Associate Professor. At least one of the positions implies residence in Edmonton as a member of the faculty group associated with the programme there.

Applicants are expected to demonstrate knowledge and competence in—(a) One or more methodological specializations—research, administration/policy, clinical, community, group work, and
(b) A substantive field area—child welfare, family services, services for aged, industrial practice, comparative development, housing, income maintenance, criminal justice, developmentally handicapped, etc.

Preference will be given to candidates with doctoral qualification and both teaching and practice experience.

Responsibilities include undergraduate and graduate teaching and supervision of graduate students. Demonstrated skill in initiating and coordinating team activities in teaching and research would be an asset.

Salary dependent on qualification. Appointments to take effect August or September, 1978. Interested persons should make application to: L. H. Tyhy, Dean, Faculty of Social Welfare, University of Calgary, Calgary, Alberta.

UNIVERSITY OF ST. ANDREWS
RESEARCH FELLOW IN STATISTICAL COMPUTING
Applications are invited for a research fellowship to review and develop further statistical methods for exploratory data analysis. Postgraduate research experience is required, with a strong background in statistics. A working knowledge of computer methods and statistical software is essential.
The appointment will be for 2 years in the first instance, with the possibility of extension.
Salary on Research Range 1A £3,333-£6,687 plus U.S.S., starting point depending on qualifications and experience.
Applications (2 copies) including a curriculum vitae and the names of 3 referees should be sent by 24th February to Mr. M. Weatherill, Department of Computational Science, University of St. Andrews, Fife, KY16 9SX, from whom further particulars may be obtained.

BELFAST
The Queen's University
LECTURESHIP IN ART HISTORY
Department of Extra-Mural Studies
This post is tenable from 1st October, 1978. Applicants should preferably be qualified to lecture to adult groups, to conduct research and to organise and supervise the programmes of part-time lecturers in Art History and cognate fields.
The salary scale (under review) is £5,535-£6665 with contributory pension rights under FSSU/USS. Initial placing on the scale will depend on age, qualifications and experience.
Further particulars may be obtained from The Personnel Officer, The Queen's University of Belfast, BT7 1NN, Northern Ireland (Please quote Ref. 76/1115). Closing date: 17th February, 1978.

Opening anticipated for a senior level appointment.
Areas of concern:
1) experience teaching at Graduate level and good publication record required;
2) dramatic literature/theory;
3) stress on Continental drama and/or non-Western drama preferred.
Ph.D. required. Résumé and/or placement files requested to be sent by deadline of March 1, 1978. An Equal Opportunity/Affirmative Action Employer. Correspondence and résumé should be sent to: Department Chairman, Department of Dramatic Art, University of California, Santa Barbara, Ca. 93106, U.S.A. Deadline to apply is March 1, 1978.

Universities continued

UNIVERSITY OF STIRLING

SENIOR LECTURER/ LECTURER IN ACCOUNTANCY

Applications are invited by the Department of Accountancy and Business Law (head of Department—Professor J M S Risk, PhD, CA, FCMA, JDipMA, FCIS, FBIM, FIMC).

The Department has been expanding rapidly and is expected to continue to require additional staff. Applications will be welcomed from candidates of varied background, but specialisation of interest could be along one of the following lines:—

Financial and corporate accountancy. Auditing. Taxation. Management accountancy and financial management. Finance and investment.

A three years general degree and a four years honours degree are provided. There are also combined honours degrees with other departments, including Computing Science, Economics, Management Science, and Mathematics. Other combinations are under discussion.

The salaries are within the range £6443 to £7951 (for Senior Lecturer) and £3333 to £6655 (for Lecturer); plus FSSU/USS. Salaries are currently under review. A full curriculum vitae including the names of two referees should be submitted.

Further particulars are available from The Secretary (THS), University of Stirling, Stirling FK9 4LA, to whom applications should be sent within three weeks of the appearance of this advertisement.

KENYATTA UNIVERSITY COLLEGE—KENYA

(a constituent College of the University of Nairobi)

Applications are invited for the post of

SENIOR LECTURER/ LECTURER

in the FINE ART DEPARTMENT. Applicants must be holders of a good degree in the History of Art and Design with teaching experience in a University or College of Art and Design. They should be capable of applying their specialist knowledge to prevailing conditions and nature of a given area in Africa. The appointee will be expected to take charge of the teaching of appreciation of Art and Design throughout the Department of Fine Art with particular emphasis on the Socio-Cultural background of Art and Design including aspects of the Psychological-Physiological nature of Man in relation to his Visual Creativity. Salary scales: Senior Lecturer K£2772-K£3600 p.a. Lecturer K£1600-K£3096 p.a. (K£1=£1.34 sterling). Salaries currently under review. The British Government is unlikely to provide salary supplementation and associated benefits. Terms of service include subsidised housing, membership of SSSF or FSSU and a non-contributory medical scheme and family passages. Detailed applications (two copies) including a curriculum vitae (applicants should give three names of Academic referees and their addresses and at the same time request them to send their references direct to the Registrar without delay), should be sent by airmail not later than 30 January, 1978, to the Registrar, Kenyatta University College, P.O. Box 43844, Nairobi, Kenya.

Applicants resident in UK should send one copy to the Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

LEICESTERSHIRE

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

CHAIR IN HISTORY

The University amalgamated with the former Loughborough College of Education last August and applications are invited for the post of Professor of History in the re-formed institution's Department of History. Candidates will be expected to have a strong academic background in modern history; administrative experience would be an advantage. A major responsibility of the new professor will be to stimulate and extend the Department's range of activity, both in teaching and research.

Salary within professorial range.

Further particulars and application forms are available from Paul Johnson, Establishment Officer, ref.: 78/4911. Candidates wishing to discuss the appointment informally should write to Professor Leonard Cantor, Senior Pro-Vice-Chancellor, or telephone him at L'boro 63171, ext. 298.

EAST ANGLIA

THE UNIVERSITY

Norwich

LECTURESHIP in SOCIAL WORK from 1st August, 1978. The person appointed will be responsible for teaching and organising the Practical Social Work course. He or she will also be expected to play an active part in course administration, in supervising the professional development of students and in placement liaison. Salary will be within the range £3,333 to £6,665 (under review) plus U.S.S., F.S.S.U. benefits.

Applications (one copy only), giving the names of three persons to whom reference may be made, should be lodged with the Establishment Officer, University of East Anglia, Norwich NR4 7TJ (Telephone 0603 56161, Ext. 2126) from whom further particulars may be obtained, not later than 10th February, 1978.

No forms of application are issued. In naming three referees you are particularly requested to give only the names of those who can immediately be approached.

MANCHESTER

THE UNIVERSITY INSTITUTE OF SCIENCE AND TECHNOLOGY

CHAIR IN COMPUTATION

Applications are invited from candidates of either sex for this Chair in the Faculty of Technology concerned with practical aspects of programming and data processing. Ability and ambition in research are essential and, whilst any of the following areas would be of special interest: Software Engineering and Manufacture, Operational Research, Systems Analysis and Data Processing, Distributed Computing, emphasis is placed on quality, originality, drive and ability to interact successfully with other disciplines so that involvement in aspects of CAD and interactive computing, hardware design, etc., will certainly be taken as relevant.

Salary will be on the Professorial range with a minimum of £8,106 per annum (under review).

Further particulars and application forms may be obtained from the Registrar, UMIST, P.O. Box 88, Manchester, M60 1QD, by quoting reference CJM/2/1/3. Closing date for applications: 17th February, 1978.

THE OPEN UNIVERSITY

Summer School Tutorial Staff

Appointments for one or two weeks are available at the Open University's summer schools held at universities throughout Great Britain between 8 July and 9 September.

Tutor Posts in the Faculties of Arts, Mathematics and Science

There will be a certain number of TUTOR posts in the following subject areas:

Art History, Architecture and Design, Drama, History, Music, Philosophy, and Literature (the Novel – final year of presentation).

Mathematics: courses coded M101, M201, M202 and MST281.

Biology (all subdisciplines including Genetics), Chemistry (organic, inorganic and physical), Earth Sciences and Physics.

Tutor Posts in the Faculty of Technology

Tutors qualified in Elementary Mathematics and Modelling (for technologists), Materials Science Technology, Systems (design, planning, implementation, management, analysis, modelling of social or technical systems).

TS282 – Electromagnetics and Electronics

T291 – Instrumentation.

Tutors qualified in electronics and/or instrumentation; previous teaching experience an advantage.

TAD292 – Art and Environment

Tutors to run creative project work in visual arts, sound, theatre, dance, environmental design, creative writing and community print.

Tutor Posts in the Faculty of Social Sciences

D101 – Making Sense of Society

Tutors qualified in one or more of: economics, geography/town planning, politics/international relations, psychology, sociology; to teach in one of the three interdisciplinary modules: housing, sex and gender in society, a political simulation exercise on the Bosnian crisis, 1908-9.

DS261 – An Introduction to Psychology and

D303 – Cognitive Psychology

Tutors qualified in experimental psychology: for D303 computer experience desirable.

D204 – Fundamentals of Human Geography

Tutors qualified to teach modern geography, especially with reference to urban retailing, rural social geography and statistical techniques.

Demonstrator Posts

Applications for the post of DEMONSTRATOR are invited from graduates in the Sciences to work in the areas of Biology, Chemistry, Physics and Earth Sciences; from graduates in the Sciences and Engineering to work in the areas of Acoustic Measurement, Electronics, Materials Science, Systems, Structures, Energy Conversion, Metallography, Design, Production Systems, Environmental Science and Computing; also from graduates in Psychology.

Application Procedures

For further particulars and an application form, send a *postcard* with your name and address to the Tutors Office, (SS 2), P.O. Box 82, Milton Keynes MK7 6AU. All completed application forms must reach the Open University by Monday, 6th February 1978.

MURDOCH UNIVERSITY

Perth, Western Australia

Murdoch University, Western Australia's second university, admitted its first students in February, 1975. The university is committed to taking a fresh approach to higher education, with the goal of responding directly to the conditions and needs of the late twentieth century. This is reflected in admission policies, organizational structures, programmes of study, philosophies of teaching and recruitment of staff. The university is organized on a system of schools of study, with the Dean of each school having both academic and administrative responsibility.

Applications are invited from suitably qualified persons for the following position, which is to be taken up as early as possible in 1978.

SCHOOL OF EDUCATION

Dean, Professor D. V. Hill

LECTURER/SENIOR LECTURER IN EDUCATION (EDUCATIONAL PSYCHOLOGY)

(Reference: ENO 227)

The School of Education at Murdoch University offers undergraduate programmes in teacher education to prepare primary and secondary school teachers and a Diploma in Education for graduates wishing to teach at secondary or tertiary level. Postgraduate coursework programmes are available for students seeking Bachelor of Education and Master of Education Degrees. Postgraduate research studies are offered for both MPhil and PhD degrees.

Applicants for the present position should be qualified in both psychology and education. The appointee will be expected to teach undergraduate and graduate courses in education psychology to education students and also to make a significant contribution to the Masters in Applied Psychology Programme offered by the School of Social Inquiry. This programme for qualified psychologists offers major studies in clinical and educational psychology.

Experience and research in clinical aspects of educational psychology (such as School Guidance) or special education are, therefore, highly desirable. The appointee will also be expected to supervise postgraduate research students.

Salary range: Lecturer, $A14,632 to $A19,262; Senior Lecturer, $A19,675 to $A22,955 per annum.

Conditions of appointment include: superannuation similar to FSSU, long-service leave, assisted study leave, payment of fares to Perth for appointee and dependent family, removal and settling-in allowances, and house-purchase scheme.

PROCEDURE FOR APPLICATIONS: There is no prescribed application form, but TWO COMPLETE SETS of detailed applications, quoting the appropriate reference number including full personal particulars, details of tertiary qualifications, career history with description of posts held, area of special competence and interest, research completed or currently being undertaken, personal views on teaching, membership of professional institutions or societies and positions of responsibility in these; list of relevant material published by the applicant, when available to take up appointment if offered, and the names and addresses of three professional referees should reach the Personnel Officer, Murdoch University, Murdoch, Western Australia, 6153, by February 17, 1978.

Applicants resident in the United Kingdom, Europe and Africa at the time of application should also forward ONE FURTHER COPY to Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may be obtained.

MURDOCH UNIVERSITY

Perth, Western Australia

Murdoch University, Western Australia's second university, admitted its first students in February, 1975. The university is committed to taking a fresh approach to higher education, with the goal of responding directly to the conditions and needs of the late twentieth century. This is reflected in admission policies, organizational structures, programmes of study, philosophies of teaching and recruitment of staff. The university is organized on a system of schools of study, with the Dean of each school having both academic and administrative responsibility.

Applications are invited from suitably qualified persons for the following position, which is to be taken up as early as possible in 1978.

SCHOOL OF SOCIAL INQUIRY

(Dean, Professor G. C. Colton)

LECTURESHIP/SENIOR LECTURESHIP IN SOCIAL AND POLITICAL THEORY

(Reference: ENO 139)

The School of Social Inquiry comprises Programmes of Study in Social and Political Theory, Economics, History and Psychology. The Social and Political Theory Programme is presently working in three major areas: theories of non-industrial society, political economy, and theories of international relations. In addition the Programme works closely with other Programmes in the School in the development of genuinely interdisciplinary studies at Murdoch. Applications are invited from suitably qualified people who would like to contribute to the expansion of the Programme by establishing new core courses in contemporary social theory and other areas of special interest.

Salary range: Lecturer $A14,632 to $19,262; Senior Lecturer, $A19,676 to $22,955 per annum.

Conditions of appointment include: superannuation similar to FSSU, long-service leave, assisted study leave, payment of fares to Perth for appointee and dependent family, removal and settling-in allowances, and house-purchase scheme.

PROCEDURE FOR APPLICATIONS: There is no prescribed application form, but TWO COMPLETE SETS of detailed applications, quoting the appropriate reference number including full personal particulars, details of tertiary qualifications, career history with description of posts held, area of special competence and interest, research completed or currently being undertaken, personal views on teaching, membership of professional institutions or societies and positions of responsibility in these; list of relevant material published by the applicant, when available to take up appointment if offered, and the names and addresses of three professional referees should reach the Personnel Officer, Murdoch University, Murdoch, Western Australia, 6153, by February 3, 1978.

Applicants resident in the United Kingdom, Europe or Africa at the time of application should also forward ONE FURTHER COPY to Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may be obtained.

UNIVERSITY OF NEW ENGLAND
Armidale, New South Wales
DEPARTMENT OF HISTORY

LECTURESHIP IN MEDIEVAL HISTORY

(PERMANENT TENURE)

(Readvertisement)

The successful applicant will teach courses in Medieval History to undergraduate and postgraduate students. Encouragement will be given to the development of new areas of study as will research into special areas of interest.

Applicants should be established Medievalists capable of assuming responsibility for lecture courses. Interests in any area of medieval studies are acceptable and a record of published research will be particularly looked for.

Salary: $A14,632-$19,262 p.a.

Appointment will be made to the permanent staff but the University reserves the right to make this appointment probationary where it considers this appropriate. Conditions include assistance with travel and removal expenses. In addition, superannuation is available and assistance in buying or building a home. Study Leave grants are available and credit may be granted for existing Study Leave entitlement.

Further information and application forms may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Staff Officer, University of New England, Armidale, New South Wales, 2351, Australia.

Previous applicants need not reapply.

Closing date: 28 February, 1978.

KENYATTA UNIVERSITY COLLEGE—KENYA

(a constituent college of the University of Nairobi)

Applications are invited for the post of

LECTURER IN BUSINESS EDUCATION DEPARTMENT (Secretarial)

Applicants should have a first degree plus post-graduate certificate qualifications in Shorthand. The appointee will be expected to demonstrate a high-level of skill in Typing and Shorthand, and to teach content and methodology to degree students in Secretarial Science. Experience in Teaching Business Education at post-Secondary-Level Institutions will be a definite advantage.

Salary scale: K£1,800–K£3,096 pa (K£1=£1.34 sterling). Salaries currently under review. The British Government is unlikely to provide salary supplementation and associated benefits. Terms of service include subsidized housing, membership of SSSF or FSSU and non-contributory medical scheme and family passages.

Detailed applications (two copies) including a curriculum vitae (applicants should give three names of Academic referees and their addresses and at the same time request them to send their references direct to the Registrar without delay), should be sent by airmail not later than 30 January, 1978, to the Registrar, Kenyatta University College, P.O. Box 43844, Nairobi, Kenya. Applicants resident in U.K. should send one copy to the Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

UNIVERSITY OF THE WEST INDIES—JAMAICA

Applications are invited for the post of

UNIVERSITY BURSAR

The appointee will be stationed at Mona, Jamaica, and will be required to take up duties by April, 1978. Candidates should be members of a recognised professional body of accountants and have wide experience, preferably in a University, of budgetary control, financial costing, and the application of modern accounting techniques.

The University Bursar will be responsible, among other duties, for advising the Council and its Committees on financial matters, the coordination and overall responsibility of the work of the three campus bursaries within the framework of the Financial Code, the presentation of the annual consolidated accounts to Council and the annual and triennial consolidated estimates, both capital and recurrent, to Senate and Council and to the University Grants Committee. A University degree although not absolutely essential will be a distinct advantage.

Salary in the range J$16,674 p.a. [illegible] J$21,[illegible] Up to five full passages at approved rates will be provided on appointment and on normal termination. Annual Study and Travel Grant, Sabbatical Leave, Housing and other fringe benefits.

Detailed applications (six copies) giving full particulars of qualifications and experience, date of birth, marital status and the names and addresses of three referees should be sent as soon as possible to the Registrar, University of the West Indies, Mona, Kingston 7, Jamaica, W.I.

The University will send further particulars to all applicants. These particulars may also be obtained from the Inter-University Council for Higher Education Overseas, 90/91 Tottenham Court Road, London W1P 0DT.

UNIVERSITY OF HONG KONG

LECTURERSHIP/ ASSISTANT LECTURESHIP IN ARCHITECTURE

Applications are invited for a Lectureship/Assistant Lectureship in Architecture. Applicants should possess qualifications for membership of the RIBA/RIBA or their equivalent in their own countries) and should possess substantially more professional experience than the minimum required for membership of professional bodies. Some teaching experience would be an advantage though not essential. Additional professional or academic qualifications would be an asset. Candidates will be required to teach architectural Design in any of the five years of the course and in addition should preferably be able to teach Structures or Design Methods and assist the Department in developing computer graphics/computer-aided design.

The duties will vary according to the needs of the Department. Annual salaries (superannuable) are: Lecturer HK$59,[illegible] – 67,320 BAR 71,400 – [illegible]; Assistant Lecturer HK$[illegible] – 55,320. (£1 = HK$8.40 approx.) Starting salary will depend on qualifications and experience.

Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, or the Assistant Secretary (Recruitment), University of Hong Kong, Hong Kong.

Closing date for applications is 28 February, 1978.

Universities continued

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

CHAIR IN HISTORY

The University amalgamated with the former Loughborough College of Education last August and applications are invited for the post of Professor of History in the re-formed institution's Department of History. Candidates will be expected to have a strong academic background in modern history; administrative experience would be an advantage. A major responsibility of the new professor will be to stimulate and extend the Department's range of activity, both in teaching and research.

Salary within professorial range. Further particulars and application forms are available from Paul Johnson, Establishment Officer, ref.: 78/4911. Candidates wishing to discuss the appointment informally should write to Professor Leonard Cantor, Senior Pro-Vice-Chancellor, or telephone him at Loughborough 63171, ext. 298.

Loughborough *Leicestershire*

BIRMINGHAM

THE UNIVERSITY FACULTY OF LAW THE BARBER CHAIR OF LAW

Applications are invited for the Barber Chair of Law which will become vacant from 1 October, 1978.

Salary in the professorial range, plus superannuation.

Further particulars obtainable from the Registrar, University of Birmingham, P.O. Box 363, Birmingham, B15 2TT, to whom applications (12 copies; 1 from overseas applicants) naming three referees, should be sent by 20 February, 1978.

BIRMINGHAM

THE UNIVERSITY DEPARTMENT OF MUSIC

Applications are invited for a half-time LECTURESHIP in MUSIC, from 1 October, 1978. Although recent developments in the Department include the establishment of an Honours degree in Music, Drama and Dance and the acquisition of electronic equipment, equal consideration will be given to all candidates irrespective of their special interests and qualifications. The duties of the successful candidate will be spread over not less than two days per week.

Salary pro-rata on the lower part of scale £3,333 to £6,665, plus superannuation.

Further particulars from Assistant Registrar (Arts), University of Birmingham, P.O. Box 363, Birmingham, B15 2TT, to whom applications (six copies), naming three referees, should be sent by 3 February, 1978.

DURHAM

THE UNIVERSITY DEPARTMENT OF ENGINEERING SCIENCE

Applications are invited for the post of LECTURER in ENGINEERING SCIENCE from 1 April, 1978. The undergraduate course in Engineering Science consists of a unified course in civil, mechanical and electrical engineering, followed by specialisation in the final year. The person appointed will be expected to contribute generally to electrical teaching in the department. Applications from candidates with interests in gas discharges or electrical power system stability and control will be particularly welcome.

Salary on the scale £3,333 to £6,665 per annum plus superannuation.

Applications (three copies) naming three referees should be sent by 31st January, 1978, to the Registrar and Secretary, Science Laboratories, Durham DH1 3LE, from whom further particulars may be obtained.

EDINBURGH

THE UNIVERSITY

CHAIR OF EDUCATION

The University Court invites applications for the Bell Chair of Education. The terms and conditions of appointment may be obtained from the undersigned, with whom applications (one copy), giving the names and addresses of three referees, should be lodged not later than 10th February, 1978. Please quote Reference 11/77.

Charles H. Stewart, Secretary to the University, University of Edinburgh, Old College, South Bridge, Edinburgh, EH8 9YL.

LANCASTER

THE UNIVERSITY

TEMPORARY LECTURER IN GERMAN

Applications are invited from appropriately qualified graduates for a Temporary Lectureship in the above department for one year from 1st October 1978. Candidates should have special competence in the fields of 20th century literature and intellectual history and should also be willing to undertake a considerable share of language teaching within the department.

Salary on the scale £3,333 to £6,665.

Further particulars may be obtained (quoting reference 110/A) from the Establishment Officer, University House, Bailrigg, Lancaster LA1 4YW, to whom applications (five copies), naming three referees, should be sent not later than 1st February, 1978.

LONDON

THE UNIVERSITY QUEEN ELIZABETH COLLEGE [illegible]

TEMPORARY LECTURER IN SOCIAL SCIENCE [illegible]

[illegible]

LONDON

UNIVERSITY COLLEGE

DEPARTMENT OF HISTORY

Applications are invited for the post of LECTURER IN MEDIEVAL ARCHAEOLOGY in University College London from 1st October, 1978. The candidate should have special qualifications in the Archaeology of Pagan Anglo-Saxon England and [illegible] Europe. Salary scale £3,333 to £6,665 plus £450 London Allowance, U.S.S.

Applications giving names of two referees to Assistant Secretary (Personnel), University College London, Gower Street, London, WC1E 6BT, from whom further particulars may be obtained.

MANCHESTER

THE UNIVERSITY

SECRETARY FOR EXAMINATIONS

Applications are invited for this post in the Registrar's Department. The person appointed will be responsible for the conduct of University examinations. Candidates should hold a first or upper second class Honours degree and/or higher degree, and should have had substantial experience either of organizing University or public examinations or of University administration. Salary within the range for administrative Staff Grade IV in Universities. Duties to begin May–June 1978 if possible.

Particulars and application forms (returnable by February 14) from the Registrar, the University, Manchester M13 9PL. Quote ref.: 20/77/THES.

LEEDS

THE UNIVERSITY

SCHOOL OF ENGLISH

Applications are invited for the following posts available from October 1978: LECTURER in ENGLISH LANGUAGE and MEDIEVAL LITERATURE (reference 1/3 DO); LECTURERS (three posts) in ENGLISH LITERATURE (reference 4/5 DO).

Salary on the scale for Lecturers, £3,333 to £6,665.

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting the appropriate reference number. Closing date for applications, 24th January, 1978.

DEPARTMENT OF PSYCHOLOGY

Applications are invited for the post of TEMPORARY LECTURER, available from October 1978, in one of the following areas of psychology—educational, industrial, motor skills or [illegible], available to September 1981.

Salary on the scale for Lecturers £3,333 to £6,665.

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting reference number 51/2 DO. Closing date for applications 24th January, 1978.

LEEDS

THE UNIVERSITY

UNIVERSITY REGISTRY

Applications are invited from graduates interested in making a career in University academic administration for two posts of Administrative Assistant in the Registry. Experience in administrative matters may be an advantage but is not essential.

Salary on the IA Scale for Administrative Staff: £3,604 to £5,627.

Further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting reference number 112/77/DO. Closing date for applications 27th January, 1978.

MANCHESTER

THE UNIVERSITY INSTITUTE OF SCIENCE AND TECHNOLOGY

CHAIR IN POLYMER ENGINEERING

Applications are invited from candidates of either sex for this important new Chair. Applications from Mechanical Engineers would be particularly welcome, but there is no undue restriction as to the qualifications and experience of candidates. Any area of polymers including plastics, elastomers, processing equipment, design, is available for study. The new Professor must be strong in research, in innovation and in teaching and must provide academic leadership to enhance the collaboration between the Polymer Engineering activities of the Institute's Departments of Mechanical Engineering and Polymer and Fibre Science, both of which have members of staff already involved in this area.

Salary will be on the Professorial range with a minimum of £8,106 per annum (under review).

Further particulars and application forms may be obtained from the Registrar, UMIST, P.O. Box 88, Manchester M60 1QD, by quoting reference [illegible]. Closing date for applications: 17th February, 1978.

MANCHESTER

THE UNIVERSITY INSTITUTE OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF [illegible]

[illegible]

MANCHESTER

THE UNIVERSITY INSTITUTE OF SCIENCE AND TECHNOLOGY

MECHANICAL ENGINEERING DEPARTMENT (THERMODYNAMICS AND FLUID MECHANICS DIVISION)

RESEARCH ASSISTANTSHIP

[illegible]

MIDDLESEX

BRUNEL UNIVERSITY

DEPARTMENT OF PSYCHOLOGY

Applications are invited for a LECTURESHIP in the Department, tenable from September, 1978. Whilst applicants may have a background in any area of psychology, the Department is expected to expand its work both in the clinical field and in the context of industry. Applicants should be able to contribute to this expansion, in terms of undergraduate teaching, research and the supervision of students on work-placement.

The appointment will be made within the Lecturer scale £3,333 to £6,665 (under review), plus £450 London Allowance. However the terms of the appointment are flexible, and a part-time arrangement might be envisaged if this enabled the successful candidate to sustain professional commitments outside the University.

Further particulars and a form of application may be obtained from the Assistant Secretary (Establishment), Brunel University, Uxbridge, Middlesex UB8 3PH, telephone Uxbridge 37188, Ext. 36; or from Professor Liam Hudson, Ext. 210. Closing date: 1st March, 1978.

NEWCASTLE UPON TYNE

THE UNIVERSITY

DEPARTMENT OF ADULT EDUCATION

TEMPORARY STAFF TUTORSHIP

Applications are invited from candidates, men and women, who have good academic qualifications and some experience in adult education. The relevant subject areas are the social sciences, the biological sciences or some aspect of adult education. The post will appeal to someone who, in addition to the above, has an interest in the role of universities in Continuing Education. The appointment will be for a period of three years and will commence from a date as soon as possible.

Salary will be at an appropriate point on the Lecturers' scale £3,333 to £6,665 p.a. (which is under review), according to age, qualifications and experience. Membership of the appropriate university superannuation scheme will be required.

Further particulars may be obtained from the Registrar, The University, Newcastle upon Tyne NE1 7RU, with whom applications (three copies), together with the names and addresses of three referees, should be lodged not later than February 3, 1978. Please quote reference THES.

NEWCASTLE UPON TYNE

THE UNIVERSITY

DEPARTMENT OF MUSIC

Applications are invited from men and women for a post of LECTURER in MUSIC to teach musical history and traditional compositional techniques and to supervise research projects. A knowledge of medieval and Renaissance music would be welcomed as well as a willingness to participate in general musical activities. The successful candidate, who would normally be expected to hold a degree in music, will take up duty from October 1, 1978.

The salary will be at an appropriate point on the Lecturers' scale £3,333 to £6,655 p.a. (under review) according to age, qualifications and experience. Membership of the appropriate university superannuation scheme will be required.

Further particulars may be obtained from the Registrar, The University, 6 Kensington Terrace, Newcastle upon Tyne NE1 7RU, with whom applications (3 copies), together with the names and addresses of three persons to whom reference may be made, should be lodged not later than February 3, 1978. Please quote reference THES.

NEWCASTLE UPON TYNE

THE UNIVERSITY

[illegible]

[illegible]

NEW ZEALAND

VICTORIA UNIVERSITY OF WELLINGTON

SENIOR LECTURESHIP IN INDUSTRIAL RELATIONS

The Council of the Victoria University of Wellington invites applications from men and women for a Senior Lectureship in Industrial Relations. The vacancy occurs through the forthcoming retirement of Mr. Noel S. Woods, a former Secretary of Labour, and a Visiting Fellow since 1970. Mature candidates with good academic qualifications in the social sciences, potential in teaching and research, and with broad practical experience in any area of industrial relations, preferably in New Zealand, are invited.

The appointment will be made with normal tenure or with limited tenure combining three years. The appointment will commence no earlier than 1st July, 1978.

The salary scale for Senior Lecturers is NZ$16,421 to NZ$15,[illegible] p.a. where there is a bar, then NZ $16,[illegible] p.a. including cost of living and other allowances.

Conditions of employment may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications close on 28th February, 1978.

NEW ZEALAND

UNIVERSITY OF CANTERBURY

Christchurch

LECTURER IN RELIGIOUS STUDIES

Applications are invited for the above-mentioned position in the Department of Philosophy and Religious Studies.

Preference will be given to candidates qualified in Islamic studies, ability to lecture on Judaism at undergraduate level would be an advantage.

The salary for Lecturers is on a scale from NZ$10,565 to NZ$12,969 per annum.

Particulars, including information on travel and removal allowances, study leave, housing and superannuation, may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications close on 28th February, 1978.

NEW ZEALAND

UNIVERSITY OF CANTERBURY

Christchurch

Applications are invited for the following positions:

LECTURER or SENIOR LECTURER in ACCOUNTANCY:

Applicants should be capable of lecturing in financial or management accounting. An ability to lecture also in business finance or in computer applications to business systems or in auditing would be desirable.

Applications close on 17 March, 1978.

LECTURER or SENIOR LECTURER in CIVIL ENGINEERING:

Applicants should have a good degree and a specialised knowledge in the history of civil engineering. An interest in structural mechanics or engineering materials would also be an advantage.

Applications close on 30 April, 1978.

LECTURER in ZOOLOGY:

Applicants should be qualified to teach undergraduate genetics and will be expected to lecture and conduct laboratory classes in this branch of zoology.

Applications close on 28 February, 1978.

The salary for Senior Lecturers is on a scale from NZ$16,556 to NZ$12,980 per annum and for Lecturers is on a scale from NZ$10,565 to NZ$12,969 per annum.

Particulars, including information on travel and removal allowances, study leave, housing and superannuation, may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

OXFORD

WADHAM COLLEGE

Applications invited from men and women under 30 for a one-year BOWRA RESEARCH FELLOWSHIP from October 1978. The Fellowship, carrying a small supplementary stipend only, is for any discipline. Applications from seniors on sabbatical leave (recently for two terms) welcome. Further particulars from Senior Tutor.

NEW ZEALAND

UNIVERSITY OF AUCKLAND

Applications are invited for the following full-time positions. Conditions of Appointment and Method of Application are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Assistant Registrar (Academic Appointments) at the University of Auckland. Applications will be accepted at any time up to 28 February, 1978. Prospective candidates should note that all locally employed staff are supplemented by a cost of living allowance of [illegible] per annum.

GEOGRAPHY — PROFESSOR AND HEAD OF DEPARTMENT: The vacancy arises because of the retirement of Professor K. B. Cumberland in May 1978.

Besides being experienced in University teaching the appointee should be active in research and have a substantial record of research publications. Candidates suitably qualified in any branch of Geography will be considered.

At present professorial salaries are established within the range NZ $19,[illegible] to $[illegible] per annum having regard to the qualifications of the candidate concerned.

HISTORY — SOUTH EAST ASIAN — LECTURESHIP OR SENIOR LECTURESHIP:

Applicants should state in their applications their main field of interest, together with any subsidiary fields in which they are able to teach.

At present, salaries for Lecturers and Senior Lecturers are established within the range NZ$10,565 to $[illegible] per annum.

READING

THE UNIVERSITY

LECTURESHIP IN LAW

Applications are invited for a Lectureship in the Department of Law. Applications are welcomed from candidates with interests in all fields of legal studies.

The person appointed should take up duties on 1 October, 1978.

Further information may be obtained from the Registrar (Room 211), Whiteknights House, The University, Whiteknights, Reading RG6 2AH, by whom applications should be received not later than 4 February, 1978.

READING

THE UNIVERSITY

CENTRE FOR APPLIED LANGUAGE STUDIES

TUTORSHIP IN ENGLISH AS A FOREIGN LANGUAGE

Applications are invited for the above post in the Centre for Applied Language Studies, for a period of not less than two years from June 1, 1978, or as soon as possible thereafter.

Applicants who should be University graduates, with a good honours degree and a postgraduate qualification in teaching English as a foreign language or in applied linguistics, should have relevant teaching experience in Latin America, the Middle East or non-anglophone Africa and Asia, and should have experience of courses for teachers.

The salary will be at an appropriate point on the national salary scale for lecturers, together with superannuation.

Further information may be obtained from the Registrar (Room 211), Whiteknights House, The University, Whiteknights, Reading RG6 2AH, by whom applications should be received not later than February 18, 1978.

RHODESIA

THE UNIVERSITY

DEPARTMENT OF SOCIOLOGY

SENIOR LECTURESHIP/ LECTURESHIP IN SOCIAL ADMINISTRATION

Applications are invited for the above-mentioned post, duties to be assumed as soon as possible. An experienced social administrator or lecturer is required who will be able to direct and orientate the study and practice of social administration in Rhodesia, with special reference to rehabilitation. Knowledge of public administration and/or business studies would be an advantage.

Salary Scale (Approx. Stg. Equiv.): Senior Lecturer: £7,562 by 278 to £7,630 by 281 to £7,918 by 298 to £9,706; Lecturer Grade 1: £6,675 by 218 to £7,667; Lecturer Grade II £4,118 by 218 to £5,208 by 233 to £6,340.

Permanent Pensionable Terms: Family passages and allowance towards transport of effects on appointment. Installation loan of up to half of one year's salary if required. Unfurnished University accommodation guaranteed for a period of at least three years for persons recruited from outside Rhodesia. Sabbatical Leave and triennial visits with travel allowances. Superannuation and medical aid schemes.

Short-term Contracts: Family passages and allowance towards transport of effects. Assistance with accommodation for persons recruited from outside Rhodesia.

Applications: (Six copies) giving full personal particulars (including full name, place and date of birth, etc.), qualifications, experience and publications and names and addresses of three referees, should be submitted by 30th January, 1978, to the Registrar, University of Rhodesia, P.O. Box MP 167, Mount Pleasant, Salisbury, Rhodesia, from whom further particulars may be obtained. Overseas applicants should send a copy of their applications to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may be obtained.

British subjects considering applying for posts in Rhodesia are urged to consult the Foreign and Commonwealth Office (telephone 233 3143) or their nearest British Consular Office.

RHODESIA

THE UNIVERSITY

LECTURER/SENIOR LECTURER IN DEPARTMENT OF GEOLOGY

Applications are invited for [illegible]

Applicants should have at least an honours degree in Geology and [illegible] ability to teach Sedimentology. Experience in one or more of the fields of structural geology and economic geology would be an added advantage.

Salary Scales (approximate sterling equivalents): Senior Lecturer £7,562 by 278 to £7,630 by 281 to £9,706; Lecturer Grade 1 £6,675 by 218 to £7,667; Lecturer Grade 2 £4,118 by 218 to £5,208 by 233 to £6,340.

Permanent Pensionable Terms: Family passages and allowance towards transport of effects on appointment. Installation loan of up to half of one year's salary if required. Unfurnished University accommodation guaranteed for a period of at least three years for persons recruited from outside Rhodesia. Sabbatical Leave and Triennial Visits with travel allowances. Superannuation and medical aid schemes.

Short-term Contracts: Family passages and allowance towards transport of effects. Assistance with accommodation for persons recruited from outside Rhodesia.

Applications: Six copies giving full personal particulars (including full name, place and date of birth, etc.), qualifications, experience and publications and names and addresses of three referees, should be submitted by 31 January 1978 to the Senior Assistant Registrar (Science), University of Rhodesia, P.O. Box MP 167, Mount Pleasant, Salisbury, Rhodesia. Overseas applicants should send a copy of their applications to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may be obtained.

British subjects considering applying for posts in Rhodesia are urged to consult the Foreign and Commonwealth Office (telephone 233 3143) or their nearest British Consular Office.

RHODESIA

THE UNIVERSITY

FACULTY OF SCIENCE

DEPARTMENT OF BIOCHEMISTRY

Applications are invited for the following post within this Department:—CHIEF TECHNICIAN. The successful candidate will be responsible to the Head of Department for the Department's technical services, equipment and staff. Prospective candidates must have one of the following qualifications or an approved equivalent and have had a minimum of five years' relevant post-qualification experience, i.e. Diploma in Medical Laboratory Technology at Final Level, preferably in Clinical Chemistry; the City and Guilds Advanced Certificate in Biochemistry or Chemistry. In addition relevant experience in instrumentation, maintenance and electronics and proven administrative ability would be further recommendations.

Salary Scale (approx. stg. equivalent): £4,719 to £5,274 to £6,911 or £7,168 depending on qualifications.

Pension and Medical Aid Schemes. Attractive leave conditions. Family fares and allowance for transport of effects are available on appointment.

Applications: Six copies giving full personal particulars (including full name, place and date of birth, etc.), qualifications, experience and the names and addresses of two referees, should be submitted to the Assistant Registrar, Faculty of Science, University of Rhodesia, P.O. Box MP 167, Mount Pleasant, Salisbury, from whom further particulars may be obtained. Applications should reach him by not later than January 31, 1978.

British subjects considering applying for posts in Rhodesia are urged to consult the Foreign and Commonwealth Office (telephone 233 3143) or their nearest British Consular Office.

SOUTHAMPTON

THE UNIVERSITY

FACULTY OF MEDICINE HUMAN REPRODUCTION AND OBSTETRICS

Applications are invited for the permanent post of EXPERIMENTAL OFFICER in HUMAN REPRODUCTION and OBSTETRICS. The person appointed will be expected to be in charge of the laboratories and to undertake a wide range of interesting experimental projects for the HoD. Candidates should have practical laboratory experience in Biochemistry/Endocrinology and research experience to Ph.D. level will normally be required.

Salary scale: £2,901 to £4,811 (under review). The initial salary will depend on qualifications and experience. Ref.: 859/A/THES.

A RESEARCH FELLOW is to be appointed to work on a project enquiring into the uptake of family planning and abortion services in the Wessex Region.

A first degree in Sociology, Social Administration, Psychology, etc., is required and a higher degree or doctorate would be desirable. Although it is intended to appoint at Research Fellow level, the possibility exists of appointment as a Research Assistant for a less experienced candidate. The project will run for up to three years.

Salary scales: £3,333 to £5,627 for a Research Fellow and £2,901 to £4,190 for a Research Assistant (both scales under review). Ref.: 875/B/THES.

Further particulars for these posts may be obtained from Mr. C. W. L. Swann, The University, Southampton SO9 5NH, to whom applications (4 copies for Experimental Officer post and 1 copy for Research post), should be sent, quoting appropriate reference number, by 27 January, 1978.

Universities continued

SOUTHAMPTON
THE UNIVERSITY
CHAIR OF POETRY

Applications are invited for the Chair of Poetry, tenable from October 1978. Salary within the professorial range.

Further particulars may be obtained from the Academic Registrar, The University, Southampton SO9 5NH and applications (10 copies) from applicants in the United Kingdom must be submitted before 10 February 1978.

SOUTHAMPTON
THE UNIVERSITY
CHAIR OF APPLIED LINGUISTICS

Applications are invited for appointment to the Chair of Applied Linguistics which will become vacant in September 1978. The appointment, to be supported by a grant from the British Film Institute, will be for a period of three years, in the first instance. Duties will be to teach courses on the critical and historical study of film in the first two years of the B.A. degree. A subsidiary interest in television studies would be an advantage. Salary on scale £7,555 to £9,660 (currently under review).

Applications, with names of three referees, should be sent by 20 February 1978 to the Secretary (SHG), University of Stirling, Stirling FK9 4LA, from whom further particulars may be obtained.

ULSTER
THE NEW UNIVERSITY
ASSISTANT PHYSICAL RECREATION OFFICER

Applications are invited for the above post. Candidates should have a recognised qualification in physical education.

Salary scale (with effect from 1.9.78): £2,301 - £3,111 per annum under review.

Application forms and further particulars should be obtained from the Registrar, The New University of Ulster, Coleraine, Northern Ireland BT52 1SA (telephone 026-7-4-1) to which completed applications, including the names and addresses of three referees, should be sent by 3rd February, 1978, later both February, 1978.

SOUTHAMPTON
THE UNIVERSITY
MEDICAL SOCIOLOGY UNIT
Wessex Regional Health Authority
LECTURESHIP
(or Temporary Lectureship)

Applications are invited for the post of Lecturer in the Department of Medical Sociology (or Temporary Lecturer in the Department of Sociology) tenable from 1st October 1978 (or the successful candidate will be required to undertake work for the research activities of the Unit) and posts will be involved in the day to day running of the Department. The ideal candidate will be a well developed with an interest in all aspects of medical sociology, preferably some biological experience. Salary scale £5,555 to £7,555 under review, initial salary will depend upon qualifications and experience.

Further particulars may be obtained from Mr. C. Swann, The University, Southampton SO9 5NH (quoting reference SS/78) and applications (two copies) should be sent to him by 10th February, 1978. Please quote ref.: THES/JAN/78.

SURREY
THE UNIVERSITY
DEPARTMENT OF HOTEL CATERING AND INSTITUTIONAL MANAGEMENT
SENIOR LECTURER IN ACCOUNTING (CIPFA)

The post will be available from the above post will be expected to teach to all stages of the BSc (Hons) degree course in Hotel and Catering Administration, and in the Postgraduate Diploma and Certificate courses. In the short term, a good degree in economics or preferably a higher degree or comparable experience, and should have demonstrable knowledge of aspects of tourism or a closely related field. While applications from persons with a strong interest in macroeconomics and a commitment to research would be particularly acceptable.

Salary will be within the range £5,145-£7,501 per annum, plus superannuation under USS conditions.

Further particulars of the post may be obtained from the Academic Registrar (quoting reference 78/1), University of Surrey, Guildford, Surrey GU2 5XH and applications, three copies of which, in the form of a curriculum vitae and the names and addresses of two referees, should be sent to the same address by 6 February, 1978.

Fellowships and Studentships

ST. JOHN'S COLLEGE
OXFORD
FELLOWSHIPS IN CLASSICS AND MODERN HISTORY

The College invites applications from suitably qualified men and women for:—

(i) an Official Fellowship in Classical Languages and Literature; and (ii) an Official Fellowship in Modern History.

Both appointments to be tenable from 1 October, 1978, or as soon after as convenient.

For:—

(i) candidates should be prepared to teach Greek and Latin Language and Literature for Honour Moderations, Literae Humaniores and related Schools.

(ii) candidates should be prepared to teach Medieval History (up to 1,500) for both the Preliminary Examination and Final Honour School appointments.

The College will be associated with both appointments.

Applications, with details of career and publications and the names of three referees, should be sent not later than 28 January, 1978, to the Senior Tutor, from whom further particulars may be obtained.

CAMBRIDGE
SELWYN COLLEGE
FELLOWSHIP IN LAW

Selwyn College invites applications for Staff Fellowships (men or women) in Law. The appointment would be for three years in the first instance, with no assurance of renewal. Stipend on the scale of a University Assistant Lecturer.

Applications, with a curriculum vitae and the names of two referees, should reach the Master, Selwyn College, Cambridge CB3 9DQ, by 15th February, 1978.

LONDON
THE UNIVERSITY
NORTHWICK HOLT
STUDENTSHIPS

Applications are invited from graduates of the University of London for the following Studentships for full-time research in any subject:

POSTGRADUATE STUDENTSHIPS (£1,650, plus fees, for two years).

Applicants must be graduates of not more than three years' standing.

Further details may be obtained from the Secretary to the Scholarships Committee, Senate House, London WC1E 7HU, to whom applications must be returned by 1st March, 1978.

MIDDLESEX
BRUNEL UNIVERSITY
DEPARTMENT OF GOVERNMENT
THE HANK PRIZE FUNDS
RESEARCH FELLOWSHIP

Applications are invited for a Research Fellowship to investigate the causes and consequences of the British diet in the twentieth century. Preference will be given to post-doctoral applicants, though graduates with good degrees with research experience in economic or social history will be considered. The research will be directed by Professor John Burnett (Hon.Phil., Dr.Phil., Oslo) Reader and Professor of Social Science (Lse).

Salary (under review) £3,396 to £5,781 plus London Allowance £400 p.a.

Further particulars and application forms may be obtained from Assistant Registrar (Establishment), Brunel University, Uxbridge, Middlesex, UB8 3PH, or telephone Uxbridge 37131, extension 49. Closing date 1 February, 1978.

SSRC RESEARCH FELLOWSHIPS

Fellowships in Pre-School Education and Early Development Research

The Social Science Research Council invites new three-year post-doctoral research fellowships for work on the early development and education of children prior to the commencement of schooling. The fellowships will be tenable at recognised research institutions in the United Kingdom. Further details and application forms can be obtained from Glyn Davies, Secretary, Working Group on Pre-School Education, SSRC, 1 Temple Avenue, London EC4Y 0BD. Applications should be returned by 6th February, 1978.

OXFORD
WORCESTER COLLEGE

Applications are invited for a Research Fellowship in Law tenable from 1 October, 1978. The Fellowship will be held in conjunction with a Lecturership at Balliol College, and associated with a University Lectureship (C.U.F.).

Further particulars may be obtained from the Domestic Bursar, Worcester College, Oxford, to whom applications should be returned by 31st March, 1978.

EMMANUEL COLLEGE, CAMBRIDGE
FELLOWSHIP IN LAW

The College invites applications for a College Lectureship and Fellowship in Law, tenable from 1st October, 1978. The Fellow will be required to undertake ten hours supervision teaching per week during Full Term. The stipend will be within the range of that for an Assistant Lecturer in the University of Cambridge (at present £3547-£4403 per annum), less £100 if resident in College.

Further particulars are available from the Master, to whom applications, with the names of two referees, should be sent by 13th February, 1978.

OXFORD
THE UNIVERSITY
WORCESTER AND BALLIOL COLLEGES
FELLOWSHIP AND LECTURESHIP IN LAW

Worcester College, Oxford, proposes to elect an Official Fellow and Tutor in Law from 1 October, 1978. The Fellowship will be held in conjunction with a Lectureship at Balliol College, and associated with a University Lectureship (C.U.F.).

Further particulars may be obtained from the Domestic Bursar, Worcester College, Oxford, to whom applications should be returned by 31st March, 1978.

Polytechnics

Faculty of Human Sciences
Department of Health and Social Studies

Principal Lecturer in Social Work

required to build a team to operate and develop courses in the social work area. Applicants must hold an academic qualification in a relevant discipline and desirably be qualified social workers. Further experience in teaching, research or fieldwork practice will be an advantage.

These positions offer exciting possibilities for people with imagination and vision to participate in a new programme to develop social work training, research and practice in this institution. Courses currently offered include 3-year CQSW, Social Work option in 4-year BA Sociology degree, graduate Diploma in Information & Advice Studies and Community Work Studies. Major course and research developments are being planned. (Ref. SJAO.309B)

Salary Scales: Lecturer II £3278-£5493
Senior Lecturer £5031-£6417
Principal Lecturer £5940-£7578

(Plus appropriate Government Supplement of up to a maximum of £492 and appropriate London Allowance)

Further details and application form from:
The Senior Staffing Officer (S), North East London Polytechnic, Forest Road, London, E17 4JB. Tel: 01-527 2272 • 38
Closing date: 14 February, 1978.

NELP North East London Polytechnic

THE POLYTECHNIC OF WALES
POLITECHNIG CYMRU

Applications are invited for the following post which has arisen due to the retirement of the present holder.

Head of Department of Electrical & Electronic Engineering
Grade V

Salary: £7,395 to £8,271 plus £492 salary supplement.

Applicants should possess good academic qualifications and wide experience of teaching, preferably at degree level. Industrial and/or relevant non-academic experience will be considered of value.

Further particulars may be obtained from: The Personnel Officer, The Polytechnic of Wales, Pontypridd, Mid Glamorgan, CF37 1DL (telephone: (0443) 405133), to whom letters of application should be returned by February 6, 1978.

THE POLYTECHNIC
HUDDERSFIELD
DEPARTMENT OF ACCOUNTANCY AND PROFESSIONAL STUDIES
SENIOR LECTURER OR LECTURER II IN ACCOUNTING
Ref: ACA/181

A vacancy exists for a Lecturer to join a progressive department offering teaching opportunities at degree, advanced professional and post-experience levels. A professional accounting qualification and a first or higher degree are desirable. Grade of appointment will be dependent on qualifications and experience.

Staff are expected to undertake activities, including research, in addition to teaching duties.

Salary, SL £5,523 to £6,447 (Bar) to £6,909 per annum including salary supplements. LII £3,744 to £5,985 per annum including salary supplements.

Further details and application forms, which should be returned by January 27, 1978, from the Establishment Office, The Polytechnic, Queensgate, Huddersfield HD1 3DH. (Telephone 0484 22288, ext. 2226.)

ULSTER COLLEGE
THE NORTHERN IRELAND POLYTECHNIC
Faculty of Technology
SENIOR LECTURER OR LECTURER II QUANTITY SURVEYING

Salary Scale: Senior Lecturer: £5,523-£6,447/£6,909
Lecturer II: £3,744-£5,985

Applications are invited from Chartered Quantity Surveyors or holders of equivalent degree or professional qualifications to teach in the primary surveying disciplines.

The level of appointment will depend on the qualifications or experience offered.

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,100. It has extensive new purpose built accommodation, including 750 residential places on the 14-acre campus overlooking the sea at Jordanstown, a pleasant and convenient residential area. There is a scheme of assistance with removal expenses.

Further particulars and application forms, which must be returned by January 30 may be obtained by telephoning Whitrobbey 65131, ext. 2241, or by writing to —

The Establishments Officer, Ulster College, The Northern Ireland Polytechnic, Shore Road, Newtownabbey, Co Antrim BT37 0QB

Middlesex Polytechnic

Dean of Business Studies and Management

Salary: £9,096-£9,972 p.a. incl.

Exceptional ability and experience in the area are required for the senior academic role.

Please request further information of: R. P. Horning, Clerk to the Governors, Middlesex Polytechnic, Bounds Green Road, London N11 2NQ.

Closing Date January 30. Please quote ref. A466A

SHEFFIELD CITY POLYTECHNIC
Yorkshire & Humberside Regional Management Centre
REGIONAL OFFICER

Salary Scale: £5528-£9093

This is a new post and the person appointed will be the senior executive officer of the Centre, responsible for control of staff, implementation of policies and maintaining effective liaison throughout the region. The Centre is concerned with management education, training and development to meet the needs of the region and with making effective use of the resources of educational establishments in the region. The person appointed must be able to make a significant contribution to analysing the region's needs and to meeting these. The post is based within Sheffield City Polytechnic and is at Head of Department Grade VI level.

Department of Communication Studies
LECTURER II IN COMMUNICATION STUDIES (Psychology)

Salary Scale: Lecturer II £3744-£5985

Applications are invited for the above post.

Requests for application forms in writing only please to the Personnel Department, Sheffield City Polytechnic, Hallfords House, Pitsmoor Square, Sheffield, S1 2BB, to whom completed forms should be returned by January 27th, 1978. Please quote ref.: THES.

Leeds Polytechnic
School of Education
SENIOR LECTURER/ LECTURER II in Special Education

An experienced teacher, preferably in the field of ESN(S) with postgraduate qualifications able to make a contribution in preparation of a new CNAA B.Ed degree and to teach on initial and in-service courses.

Salary Scales:
Senior Lecturer £5523-£6447 (bar)—£6909
Lecturer II: £3744-£5985 (includes supplements)

Details from:
The Services Officer (SE. 13)
Leeds Polytechnic
Calverley Street,
Leeds LS1 3HE. 0532 41181
Please enclose S.A.E.
Closing Date: 27 January, 1978.

LONDON
MIDDLESEX POLYTECHNIC
LAMBERWELL LECTURESHIP IN SOCIAL ADMINISTRATION

This post is tenable for three years, commencing as soon as possible in 1978 or later.

Applicants should be suitably qualified graduates and be able to show a clear commitment to social work education. Experience in the field of social administration would be considered an advantage.

Salary scale: Lecturer II (under review) £3,744 to £5,985 per annum inclusive.

Application forms and further particulars may be obtained from the Personnel Officer, Middlesex Polytechnic, Queensway, Enfield, Middlesex EN3 4SF, quoting reference number 78/1. Closing date 31 January, 1978.

PLYMOUTH POLYTECHNIC
SENIOR ASSISTANT REGISTRAR & EXAMINATIONS OFFICER

Salary: £4239-£4545 (+£520.56 p.a. supplement)

The post holder will be responsible for the overall supervision of all aspects of the examination arrangements for students of the Polytechnic.

Considerable experience of academic administration preferably in a tertiary educational institution. Degree or equivalent professional qualification desirable.

Application forms, to be returned by 27th January, 1978, can be obtained with further particulars from the Personnel Officer.

PLYMOUTH POLYTECHNIC, DRAKE CIRCUS, PLYMOUTH PL4 8AA

Polytechnics continued

Director

The Court of Governors of Thames Polytechnic invites applications for the post of Director which becomes vacant on 1 September 1978 on the retirement of Dr. D. E. R. Godfrey.

Thames is one of the five Polytechnics grant-aided by the Inner London Education Authority. Under its Memorandum and Articles of Association the Director is the Chief Officer responsible to the Court of Governors, of which he is an ex-officio member, for the organisation, management and conduct of the Polytechnic.

The Polytechnic has approximately 2500 full-time and sandwich course students and 1500 part-time students who by September 1978 will be attending courses at the two sites of the Polytechnic at Woolwich and Dartford. Virtually all its work is of degree equivalent level or above and extensive research programmes are carried out in many of its Schools, often in collaboration with industry, commerce and public services.

The Polytechnic is graded in Burnham Group 10 and the Director's post currently carries a gross salary of £13,017 including London weighting.

Further particulars of the post and a form of application may be obtained from R. J. Stephens, M.A., Secretary and Clerk to the Court of Governors, Thames Polytechnic, Wellington Street, Woolwich, SE18 6PF, to whom completed applications should be returned not later than 7 February 1978.

Thames Polytechnic

Resident Assistant Hall Manager
AP3: £3,695-£4,073 pa inc.

to assist the hall manager with the efficient running of the hall of residence at the Polytechnic's Trent Park, Cockfosters, site in north London.

Applicants should hold a recognised qualification (eg. MHCIMA) and have some experience of management in a comparable post, preferably within higher education.

Furnished accommodation is available.

Please write for full details and an application form, posting first-class to: Appointments Officer (ref. 46.1801, Middlesex Polytechnic, Bounds Green Road, London N11 2NQ. Closing date January 23.

Middlesex Polytechnic

BRISTOL
THE POLYTECHNIC
FACULTY OF ADMINISTRATIVE OFFICERS
(2 Posts)

Applications are invited for two posts of Administrative Officer in the Academic Administration Division of the Administration. Both posts involve the organisation of student and course related work and servicing of academic boards. The successful holders also have responsibility for the co-ordination of administrative services at site level.

One post (AO1) has as its main focus the Faculty of Art and Design, the other (AO2) the Faculty of Technology.

Salary Scale: £3,849-£4,545 p.a. (under review)
AO1/2-1.82—£3,345—£3,792 plus supplement of £492 per annum and £208 (maximum) London Allowance.

Further details and application forms to be returned by 20th January 1978, from Personnel Officer, Bristol Polytechnic, Coldharbour Lane, Bristol BS16 1QY. Please quote appropriate Post Reference Number in all communications.

LEEDS
THE POLYTECHNIC
SCHOOL OF ELECTRICAL ENGINEERING

Temporary appointment of RESEARCH FELLOW IN CONTROL ENGINEERING.

To develop research into an aspect (preferably digital) of communication engineering and replace for 1½ years a lecturer on exceptionally a research assistant to assist in those developments.

Salary Scale: £3,933-£5,985 (includes supplements).

Details from: The Secretary (RF/EN), Leeds Polytechnic, Calverley Street, Leeds LS1 3HE. Tel: 0532 41181. Please enclose S.A.E.

Closing date: 31 January, 1978.

LEICESTER
THE POLYTECHNIC
SCHOOL OF TEXTILE AND KNITWEAR TECHNOLOGY
(Post 570)

Applications invited from persons with a special interest in Textile Manufacturing Systems for the post of LECTURER II/SENIOR LECTURER in TEXTILE and KNITWEAR TECHNOLOGY.

Salary £3,744 to £6,447 (Bar) to £6,909 p.a. (including all supplements). Point of entry dependent upon qualifications and previous experience.

Further details and application form available from: The Dilkey, Leicester Polytechnic, Box 143, Leicester LE1 9BH. Tel: 0533 551551 (ext. 230).

LANCHESTER
THE POLYTECHNIC
FACULTY OF ART AND DESIGN
PRINCIPAL LECTURER—CULTURAL STUDIES

Required for the Communication Studies course run by the Department of Art History and Communication Studies.

LECTURER GRADE II—HUMAN COMMUNICATION

Also required for the above course.

FACULTY OF SOCIAL SCIENCE

LECTURER GRADE II—with particular interest in building services and/or Construction Technology. Anyone wishing to have an informal discussion may telephone Mr. H. F. Walker, Coventry 24168, extension 277.

Salary scales: Principal Lecturer £5,949 to £7,578, plus £492; plus £400 supplements. Senior Lecturer £5,085 to £6,447, plus £492, plus £400 supplements. Lecturer II £3,744 to £5,985, plus £400 supplements.

Appointments will be made from 1st April, 1978, pay awarded.

In certain circumstances the salary may be above the maximum of the scales.

For application forms and further particulars please apply in writing, enclosing a foolscap stamped addressed envelope, to the Assistant Secretary (Personnel), Lanchester Polytechnic, Priory Street, Coventry CV1 5FB, returnable by January 20 at latest.

CENTRAL LONDON
THE POLYTECHNIC
INSIDE THE TUTOR
March 30-31, 1978

The fourth National Personnel Tutorial Conference, to be held at Central London, organised by Peter Toyne, Principal Lecturer in Personnel Management, will be of interest to those who are responsible for training and staff development in industry, commerce and the public services.

The conference will provide an opportunity to take time for discussion in order to review their needs, attitudes and personal development. The emphasis will be on small group work, as a way of improving insight and self-awareness.

Course fee: £17.00 (includes meals).

Application forms and further details from Beth Pearce, Short Courses Unit, PCL, 309 Regent Street, London W1R 8AL. Telephone: 01-580 2020 Ext. 221.

SURREY
THE UNIVERSITY
DEPARTMENT OF PHILOSOPHY
IN PHILOSOPHY

The department of philosophy offers a course with specialisation in philosophy of religion. The course is offered on a full-time basis.

Further details available from the Postgraduate Secretary, Department of Philosophy, University of Surrey, Guildford, GU2 5XH.

BARMOUTH, GWYNEDD
WEST WALES

The ideal centre for Geographical/Geological study groups. We provide accommodation at very reasonable rates. Excellent facilities. Drying Room. Residential licence.

Write Marine Mansion Hotel or Tel.: 0341 280409.

Courses



Colleges and Departments of Art

Dartington College of Arts
Principal: Peter Cox

Head of Art and Design Department
(HOD Grade III: £6723-£7515)

Applications are invited for the post of Director of the Art and Design Department, which will become vacant at the end of the present academic year.

The College, which is sponsored by the Dartington Hall Trust and assisted by the Devon County Council, has three departments for full-time students — Music, Theatre and Art and Design. It has two other departments, the Dartington Centre for Further Education and the Summer School of Music, and serves as an arts centre for South Devon through the Dartington Arts Society.

The Department of Art and Design offers a unique two year course, Art and Design in Social Contexts, which commenced in September 1977, and leads to the Diploma of Higher Education (C.N.A.A.). The Head will be expected to develop this course and to prepare proposals for a three-year degree course, building on resources already growing within the College and the wider Dartington context. The College already offers honours degrees in Music and Theatre.

Further details and an application form may be obtained from the Senior Administrative Officer, (TH), Dartington College of Arts, Totnes, Devon TQ9 6EJ.

Research Posts

RESEARCH ASSISTANT

Research Assistant required for three-year DHSS funded project evaluating detoxification facilities for the homeless drunkenness offender. The appointee would primarily analyse data under supervision but may also be involved in some data collection and research design.

Social science graduate with research experience and an interest in data analysis preferred.

Salary range £3,534 to £4,344, plus Stages 1 and 2 Supplements and cost-of-living allowance.

For further information and application form:—
Diane Harding
Maudsley Hospital
113 Denmark Hill
London SE5
(Tel: 01-701 2595)
Closing date: February 1, 1978

RESEARCH INTO THE HOUSING NEEDS OF BATTERED WOMEN

RESEARCH WORKER needed for two year project on the housing needs of battered women, sponsored by the N.C.C.P. and Evidence by the Department of the Environment. The worker will be part of a team of three.

Candidates should have a good degree and/or equivalent, or have, and/or local government and welfare experience and knowledge and probably be involved in the Women's Movement and/or Women's Aid.

The project is likely to be located in the North of England. Expected starting date 1.2.78.

Salary approximately £3,800-£4,500 plus £0.1.75.

Apply to D.H.A.R., 51 Chalcot Road, N.W.1.

Personal

POSTAL LOANS UNSECURED
£50 to £1,500
RICHMOND INVESTMENTS LTD.
4 The Green, Richmond, Surrey.

Colleges of Higher Education

Hull College of Higher Education
Cottingham Road, Hull HU6 7RT
Telephone (0482) 41461

FACULTY OF TEACHER EDUCATION AND APPLIED SOCIAL STUDIES
SCHOOL OF APPLIED SOCIAL STUDIES

Applications are invited from suitably qualified and experienced men and women for the post of

LECTURER II/SENIOR LECTURER IN SOCIAL WORK

with particular reference to the Education and Training of Mentally Handicapped Adults. The successful candidate will join an established team of staff concerned with teaching to the Dip. T.M.H.A., C.S.S., C.O.S.W., and Inservice Courses for Social Services personnel. Experience of or a qualification in the education of the handicapped is required together with a knowledge of the needs of and provision for other categories of staff in the Social Services.

Further particulars and forms of application may be obtained from Mrs. D. Liddell, Administrative Assistant (Personnel), at the above address, and should be returned not later than 27th January, 1978.

This College is formed from an amalgamation of Colleges of Art Commerce Education Nautical Studies and Technology

St Mary's College Strawberry Hill

This is a Catholic College of Higher Education with 1,200 students (mixed). It offers Internal BA, BSc, BH and BEd Degrees of London University at Honours level.
Applications are invited for the following posts:

ACADEMIC VICE-PRINCIPAL

Appointment from 1st September, 1978. Salary in accordance with Burnham Further Education Scale for Vice-Principals, Group 7 or Group 8 (under review) + London Allowance.

LECTURER IN ENGLISH

Candidates should possess an Honours Degree and Postgraduate qualifications in Language. The successful candidate will be expected to lecture in the TEACHING OF ENGLISH AS A SECOND LANGUAGE FOR THE DIPLOMA OF THE UNIVERSITY OF LONDON and to participate in the work of lecturing for BEd and BA. Salary in accordance with Burnham Further Education Scale + London Allowance. This post could be available from Easter, 1978.
Further details from the Principal, to whom applications should be sent with the names of three referees. There are no official forms. Applications should arrive not later than 3rd February, 1978, and should be addressed to: The Principal, St. Mary's College, Strawberry Hill, Twickenham TW1 4SX. Tel: 01-892 0051, ext. 22.

BUCKINGHAMSHIRE COLLEGE OF HIGHER EDUCATION
Queen Alexandra Road, High Wycombe, Bucks.
Director: D. J. Everett, BA, FFT Com.

School of Management Studies and Languages

Applications are invited from men and women for the following posts, duties to commence as soon as possible:

Senior Lecturer in Law

Candidates for this post should be graduates in Law and able to assist in the development of a CNAA degree in European Business Studies. Candidates should have experience of teaching at degree level.

Senior Lecturer in Accounting & Finance

Candidates for this post should be qualified accountants and able to contribute to the development of a CNAA degree in European Business Studies. Experience of teaching at degree level is essential and preference will be given to candidates with industrial experience.

Salary Scale: £5,523-£6,447 per annum.

Application form and further details for these posts are available from the Assistant Director, to whom completed forms should be returned as quickly as possible. Tel. No.: High Wycombe 22141.

Royal County of Berkshire
Bulmershe College of Higher Education
Appointment of

PRINCIPAL

The Secretary of State for Education and Science has approved the appointment of James E. Porter, Esq., Ed.M., as Principal of the College with effect from 1st September, 1978.
The salary for the post is £10,734 p.a. and there are substantial emoluments.
The successful applicant will be required to take up the appointment by 1st September, 1978. Closing date for applications (no forms) will be 3rd February, 1978. Further details may be obtained from the Clerk to the Governors, Bulmershe College of Higher Education, Woodlands Avenue, Earley, Reading, RG6 1HY. Telephone: Reading (0734) 663387.

Colleges of Further Education

Harrow College of Technology and Art
Faculty of Art and Photography

Senior Lecturer

SCHOOL OF PHOTOGRAPHY

£5031-£6417 + London Allowance of £402

Responsibilities will include: Course Tutor to the first year of the B.A.(Hons.) degree in Applied Photography, Film and Television; teaching the practice and principles of photography; contributing to such other subjects as aesthetics, sociology, history of visual arts, design studies, and photographic applications.

Applicants should be graduates, preferably with a qualification in education, and have had extensive experience in professional photography and photographic education. An appreciation of the general philosophy and conduct of CNAA degree courses in Art and Design is expected.

Further details and application forms are available from the Principal's office, telephone 01-864 4411, extn. 34 or 35, and application forms should be returned within 14 days.

WEST DEAN COLLEGE

PRINCIPAL

West Dean College is part of the Edward James Foundation and the Principal is responsible to the trustees. The College is recognised by the Department of Education and Science and occupies West Dean House, six miles north of Chichester. The College teaches a wide range of arts and crafts at professional and amateur level.
Courses are residential and the College accommodates about one hundred students. The short courses are weekend, five-day or ten-day, run by visiting tutors, for amateurs and semi-professionals. There are one-year professional courses in the restoration of Furniture and Clocks, run in association with B.A.D.A. The College houses a wide range of conferences and provides courses for groups from overseas. There is also a Tapestry Weaving Studio. The College is open fifty weeks a year, closing for two weeks at Christmas.
The Principal must be a good administrator, capable of running a complex organisation with a small staff. Apart from the educational work, which requires experience of art and craft education, the Principal is responsible for supervising accommodation, catering and the maintenance of large workshops. Although the College is now well-established, further development is vital.
Salary will be by negotiation and a house can be provided. The Principal will have six weeks' holiday but at other times the job involves frequent weekend duty and overtime. The Foundation has a pension scheme.
Applications, which must include a full account of education, career and relevant personal details, together with three references, should be sent to the Executive Trustee (P), West Dean College, West Dean, Chichester, Sussex, not later than Wednesday, 1st March, 1978.

DURHAM COUNTY COUNCIL
NEW COLLEGE, DURHAM
POST OF

DEPUTY PRINCIPAL

Applications are invited from suitably qualified and experienced candidates for the above post.
New College Durham was established on September 1, 1977, as a result of a merger of the Durham Technical College and Neville's Cross College of Education. It provides a very wide range of courses as a community college and is seeking to diversify its Higher Education.
The College has been placed in Group 8 under the Burnham Further Education Committee's Report and the post has a salary range £9,798 to £10,134. The initial salary will be £10,107 per annum subject to review.
A good Honours graduate is looked for with sound experience in further education and proven administrative ability in a senior post a go-ahead person.
Further particulars may be obtained from the Principal, New College Durham, Neville's Cross Centre, Durham. On receipt of a stamped addressed envelope.
The closing date for applications is 6th February, 1978.

Department of Social Studies
Selly Oak Colleges
Birmingham B29 6LE

PRINCIPAL LECTURER IN SOCIAL WORK

(Readvertisement)

Applications are invited for the post of Principal Lecturer in Social Work to head the teaching team in a newly approved course for non-graduates leading to the Certificate of Qualification in Social Work (Residential and Day Services). Applicants should preferably be graduates, professionally qualified, with good experience of teaching at degree/CQSW level, and of social work practice in appropriate fields. Experience of work with the elderly, handicapped, or day services in general, and interest in post-qualifying studies would be advantageous.
Salary: Principal Lecturer Burnham F.E. £5,940-£7,578 + £492 supplement.
Further details and application forms available from:—
Mrs. Diane Bowen, Secretary
Department of Social Studies
Selly Oak Colleges
Birmingham B29 6LE

Adult Education

Addison Adult Education Institute
Wormwood Scrubs Prison

SENIOR LECTURER

Applications are invited for the post of Education Officer, H.M. Prison, Wormwood Scrubs, Ducane Road, W.12.
The successful lecturer will be expected to share in all aspects of the administration of the educational provision at the Prison. Assistance may be given towards household removal expenses.

Salary Scale

Senior Lecturer, £6,031 to £5,955 (plus £402 Inner London Allowance plus £492 supplement).

Further details and application forms are available from the Senior Administrative Officer, Addison Adult Education Institute, Addison Gardens, W14 0DT, to whom completed application forms should be returned by February 3, 1978.

COLEG HARLECH
RESIDENTIAL COLLEGE FOR ADULT EDUCATION
TUTOR IN PSYCHOLOGY

Applications are invited for the above post. Applicants should be graduates with a good honours degree. Salary on the scale £3,735-£6,657 with superannuation benefits.
Further particulars and application form from the Registrar, Coleg Harlech, Harlech, Gwynedd, LL46 2PU. Closing date for applications 3 February, 1978.

Holidays and Accommodation

HOMES FOR EXCHANGE OR RENTAL
Private home owners/rentals arranged World-wide - Host your stay
HOMEXCHANGE (E.T.)
Sarre, Herts. HT5 0SU
London W.1

Administration

LONDON
THE UNIVERSITY
GOLDSMITHS' COLLEGE
New Cross, London SE14 6NW

Applications are invited for the new post of ASSISTANT REGISTRAR (ESTABLISHMENT). Applicants should have considerable experience in personnel practice. Such experience in universities would be particularly valuable. The salary is in the range of £5,262 to £6,921 per annum, plus London Weighting of £312 per annum and supplementary benefits. Further particulars may be obtained from the Personnel Officer.
The closing date for applications is January 31, 1978.
It is hoped that the successful candidate will be able to take up the post as soon as possible after interviews have been conducted.

MANCHESTER
[illegible]
EDUCATIONAL ADMINISTRATOR
[illegible]

Salary A.P. 1 £5,262 to £6,921 per annum plus £492 supplement. Application forms and further particulars from the Secretary, Education Office, Town Hall, Manchester, M60 2LA. Closing date 31st January, 1978.

LEICESTERSHIRE
CO-OPERATIVE COLLEGE
Stanford Hall, Loughborough
VICE-PRINCIPAL

To be responsible for day-to-day organisation of one of Britain's three adult residential colleges which specialises in training and developing people in the Co-operative Movement and in the Labour movement generally.
Salary: [illegible]
Further particulars and details from the Chief Executive Officer, Co-operative Union Ltd., Holyoake House, Hanover Street, Manchester M60 0AS, to whom application forms should be returned by 6th February, 1978.

Announcements

READING
THE UNIVERSITY
THE THIRD [illegible]
by Professor A. [illegible]

A fascinating account of the development of the Third World, the people, interest in both the country and the educational system.
Available March 28. Hardback, 320 pages, 60 photos. Price £7.95. Order now at 20% discount if sent by January 31st, carriage free.
Cash with order to: Publications Office, University of Reading, Bulmershe Court, Earley, Reading, RG6 2AH.

Administration continued

HOVE
BISHOP OF ST. GILES' SCHOOL

Applications are invited for the post of Bursar at this Church of England Long-boys' School, to start early in 1978. Candidates should have good O.L.E. qualifications and considerable experience in the private sector. Proven administrative and organisational ability essential. Good salary and excellent prospects.
Please write, giving c.v., to Miss R. M. Belgrave, Regent School, 138 Camden High Street, London NW1 0NG.

OXFORD
THE UNIVERSITY
Assistant to the Administrative Officer

Applications are invited from graduates in Classics or Ancient History, with a minimum of two years' experience in administration, for the above post, tenable from September 1978 or as soon as possible thereafter. The salary will be in the range £4,743-£6,657 per annum (under review), according to age and experience.
Further particulars should be obtained from the Deputy Registrar (Administrative), University Offices, Wellington Square, Oxford, OX1 2JD, to whom applications should be sent by not later than 1 February, 1978.

Colleges of Education

STRANMILLIS COLLEGE, BELFAST
Principal: James Pomfret, M.A., B.Sc., M.Ed.

Stranmillis College, with at present 1,020 students, is wholly concerned with the preparation of men and women for teaching in nursery, primary and secondary schools, mainly through B.Ed. degree courses of three and four years. There is a three-year Certificate course in three shortage subjects only, and a Postgraduate course. The College is non-denominational; there is no religious test.

The College is pleasantly situated in an attractive wooded estate of some 45 acres, in a quiet residential neighbourhood on the southern outskirts of the City of Belfast. New building projects to the value of £2½ million have been completed in recent years.

HEAD OF PHYSICAL EDUCATION DEPARTMENT

Applications are invited from well-qualified specialists with good teaching experience, a knowledge of current developments in teaching methods, and organizing ability for this appointment on the retirement of the present holder. Physical Education is an approved subject for the three-year General B.Ed. Degree of Queen's University, and candidates should have a good degree (not necessarily in P.E.) in order to be recognized by the University. At present there are seven other staff in the department. Facilities include three gymnasia, a hard-core area on the College site, and a sports centre of 30 acres in the city suburbs. The appointment is for September 1st.

Salary Scale: Head of Department Grade IV (£6,756 to £7,632) plus £492 under first two stages of the Pay Code, with a further review expected from April 1st. In later years there will also be the possibility of an additional allowance as Co-ordinator of a Group of Subjects.

LECTURER OR SENIOR LECTURER IN BIOLOGY

Applicants should have a good honours degree in Biology and successful teaching or lecturing experience. An interest in microbiology, plant physiology, or cytology would be an advantage. The appointment is for September 1st.

Salary Scale: £3,279 to £6,417 plus £492 under first two stages of the Pay Code, with a further review expected from April 1st. Placing initially according to experience.

Assistance with removal expenses from outside Northern Ireland.

Further information about the College and the appointments, and a form of application, may be obtained from the Secretary, Stranmillis College, Belfast BT9 5DY.

Applications should be received not later than Wednesday, February 15th.

Colleges and Institutes of Technology

ABERDEEN ROBERT GORDON'S INSTITUTE OF TECHNOLOGY

SCHOOL OF HOTEL AND INSTITUTIONAL ADMINISTRATION

LECTURER

to participate in proposed degree course in HCIMA. Graduate with relevant experience in industry/research preferred. Salary scale in range £3,688-£6,999 per annum (subject to review). Assistance with removal expenses.

Details from Chief Administrative Officer, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen AB9 1FR. (0224-574511.)

PAISLEY
PAISLEY COLLEGE
DEPARTMENT OF
ECONOMICS AND MANAGEMENT

LECTURER in Economics with special reference to Marketing, the selection of [illegible]
The successful candidate will be expected to undertake teaching in Marketing to degree and Higher National Diploma students in the Department of Economics and Management, and to undertake research in a discipline at present widely considered to be of great importance and to which graduates would be attracted. Applicants should have a good honours degree and preferably a higher degree, and qualifications and experience in Marketing or other appropriate disciplines. Candidates with qualifications in other relevant disciplines will be considered.
Salary scale: Lecturer Grade I £4,743 to £6,657.
Application forms and further particulars from Deputy Principal (Personnel Section), Paisley College, High Street, Paisley PA1 2BE, to whom they should be returned by 31st January, 1978. Closing date: 28th January, 1978.
(Informal enquiries may be made to Professor Sloane at Ext. 301.)

LOTHIAN REGIONAL COUNCIL
MARY ERSKINE SCHOOL
Head of Department of COMMERCE
[illegible]

Salary on scale [illegible]

The teacher appointed will be required to teach Commerce to pupils preparing for degree and other higher qualifications in the Sixth Year. He will be responsible for the development of the Commerce Department in this school and for the introduction of new courses. Applicants should have a degree and preferably a teaching qualification. Experience in data based teaching methods would be an advantage. Knowledge of computer principles and their application would be an advantage.
The Computer unit has an ICL 1901A computer with 64K core and a large disk. Terminals are connected with interactive facilities.
Applicants should possess an [illegible] professional qualifications.
Further particulars and application forms from the Academic Registrar, Napier College of Commerce and Technology, Colinton Road, Edinburgh EH10 5DT, quoting reference 1303.4.47

General Vacancies

TECHNICIAN EDUCATION COUNCIL

ASSISTANT CHIEF OFFICER

The Council invites applications for this important new post, which will carry substantial responsibility and offer challenging opportunities in an expanding organisation. Salary will be in the region of £9,000 p.a.
Applicants should be well qualified and have held a senior appointment in teaching, educational administration or industrial training. As the successful candidate will be a member of the management team, relevant experience and skills are essential.
Further particulars may be obtained from the Chief Officer (Ref ACO) at 76 Portland Place, London, W1N 4AA. *Closing date for applications 27th January 1978.*

Royal County of BERKSHIRE

SENIOR ADVISER

(FURTHER EDUCATION)

£7,956 to £8,580 Soulbury pts.

(It is intended to re-grade the post to Group II in due course.)

Applications are invited from persons with substantial experience in further education (at least Head of Department level). Berkshire maintains nine establishments of higher or further education, and candidates should be capable of advising principals and other college staff as well as the Director and the Committees of the Authority.
Further particulars (s.a.e.) from the Director of Education (F.E.), Konnet House, 80-82 Kings Road, Reading RG1 3BL. Closing date February 10.

Free-form Arts Trust.
requires
Two Visual Artists
to start immediately

They should offer a combination of skills including design, painting, mural painting, environments, structures, sculpture, communications media, teaching experience.
Special consideration will be given to applicants with skills in film and video.
Applicants must be interested and have some concern for the area of community arts.
The work over the first 6 months will be national touring with an experienced mixed-media team with a wide variety of creative programmes in community venues, including community centres, playgrounds, streets, parks, etc.
Applicants should be interested in communicating their specialist skills to others, and possibly in eventually forming part of a resident workshop team.
The closing date for applications is January 19. Interviews will be held on January 26 and 27 (evidence of work required), and the appointment will start from early February.
Apply in writing to Free-Form Arts Trust, 36 Dalston Lane, London E8.

Features Editor

A Features Editor is required for The Times Higher Education Supplement. He or she will be responsible for developing an overall features policy for the THES and also for the detailed administration of the features pages, in particular for commissioning articles from academics and others in higher education. A part-time appointment might be considered. All previous applicants need not apply.

BRITISH FILM INSTITUTE

HEAD OF EDUCATIONAL ADVISORY SERVICE

The Educational Advisory Service is the Institute's principal point of contact with all educational establishments at all levels. Its activities include advising teachers, and helping to construct and arrange curriculum teaching projects, producing study materials and publications, and providing a lecture service.
The Head of Department is responsible for managing and developing these activities, and is a member of the Institute's Executive. It is intended that a research element will be added to the work of the department, and the Head of Department will have overall responsibility for establishing research arrangements and organisations.
Candidates should have good educational experience, well informed knowledge of current studies in film, television and other media. In general they will be capable organisers with experience of general and financial administration.



Starting salary £7,610, on a scale rising to £8,706 (including supplements). Pay review April, 1978. Application forms and further information from Personnel Department, 81 Dean Street, London W1V 6AA. Tel.: 01-437 4355. Closing date 10th February, 1978.

Sales executive with grit

You are:
- in your late twenties
- used to dealing directly or indirectly with administrative problems in a university, polytechnic or institute of higher education
- perhaps involved with education publicity
- positively interested in joining a progressive specialist company which produces prospectuses, among other things.

We are:
- one of the foremost producers of education publicity with an established reputation
- searching for a professional to take charge of our education division within a year or less
- prepared to invest in training and proper support to do the job, as you would expect.

We are offering an excellent starting salary, a worthwhile bonus not commission, a good company car, four weeks holiday and a pension scheme as the basic rewards package.
You will have to offer drive and enthusiasm but these will be in evidence already from your progress to date.
Send a well detailed account of your career pattern and range of responsibilities, saying specifically why you want this vacancy, to

T. John Fasior
Marketing & Sales director
Hounds Group
Mill Street
Stafford

LONDON, W.1
Private college requires recently graduate graduates to give part-time courses in Law, Irish Literature, Ireland to 1922, 1978 term. Box no.[illegible], THES, 5, W.C.1.

RESEARCH ASSISTANT
Part-time, approximately £150 per month, to aid in survey of Arts Theatre audiences. Send details to Dan Smith, Polytechnic Institute, 184 North Street, Brighton, BN1 1RH. (0273-203 [illegible])

Librarians

BRISTOL
THE UNIVERSITY
DEPUTY LIBRARIAN
(BLSOURCES)
Grade IV

The university proposes to appoint a Deputy Librarian (Resources) on the retirement of the present Deputy Librarian, Mr. Lightbown. This post will complement that of Deputy Librarian (Administration and Services), to be created by the promotion of the Second Sub-Librarian (Administration). Applicants for the post should be senior librarians with considerable experience, especially in the field of acquisitions.
Applications, together with the names of three persons to whom reference may be made, should be sent by January 27, 1978, to the Secretary, University of Bristol, 8 Saint Michael's Hill, Bristol BS8 1JT, from whom further particulars may be obtained. It is proposed to make an appointment as early in the summer term as is practicable.

FURTHER GENERAL AND OVERSEAS VACANCIES APPEAR ON PAGES 9 AND 10